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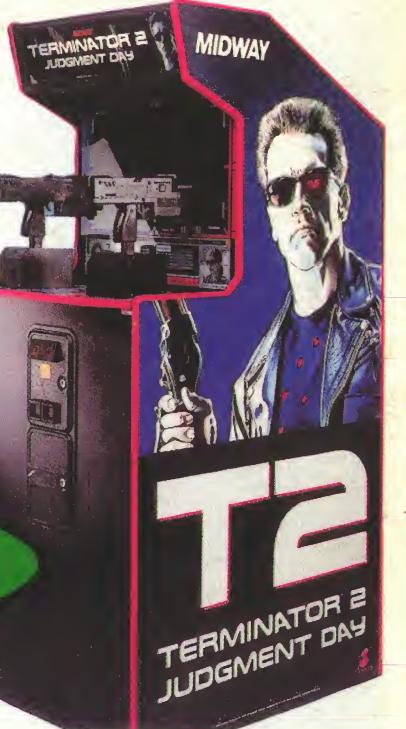
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AMSTRAD ACTION
APRIL 1992

REGULARS

4 COVERTAPE Two games and three serious proggies!

6 REACTION Oh no, the last Angry Letter of the Month... for good!

10 AMSCENE It's official! - Amstrad Action is more popular than ever

12 ON THE GRAPEVINE What are the Codles up to now...?

14 BEHIND THE SCENES AT AA At last, the truth can be told

26 SMALL ADS Selling or buying kit? Don't miss this page

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54 BUYERS GUIDE Joystick Jury - the best waggles compared!

SERIOUS

18 TECHNICAL FORUM Amstrad Action's brand new techie section featuring reviews, techie queries, techie helpline, Ask Alex and loads of top tips!

24 MASTERING MACHINE CODE Don't interrupt! All right, if you must - but only after Andy Price shows you how...

42 TYPE-INS Starting this month: brand new series on BASIC programming for beginners

GAMES

27 RODLAND Cuter than fluffy little poodles (they're in it too)

28 PREHISTORIC Ugh! Cavemen, dinosaurs, platforms, caves...

30 BLUES BROTHERS Here at last! And what a corker it is...

32 COMPILATION ROUND-UP Another batch of barg packs under scrutiny

35 CHEAT MODE Tips, passwords, maps and solutions to save your sanity...

38 BALROG Hero Quest Level One map and all your favourite adventuring info, PLUS part 3 of the GAC tutorial

44 BUDGET BONANZA More Codles Quattro Compilations! And catch up on all the latest budget re-releases



37,120

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July-December 1991

Line Up

**Behind the scenes
at AA**



14

How your favourite Amstrad magazine is put together... drama, pathos, deadlines, romance, fast cars, bags of chips, Blu-Tac, expense accounts, pens with the ends bitten off, Learjets, rubber sharks... it's better than The Young Doctors (but only just)

**Blues
Brothers**



18

Starts this month: Amstrad Action's brand new all-in-one serious section. Reviews, tips, technical queries, beginners' help... it's all here!

**Technical
Forum**



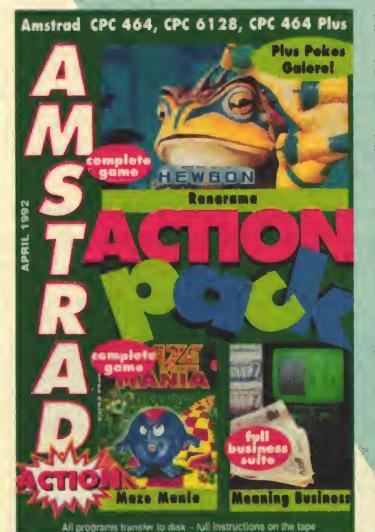
30

TNT2 and more - the best of the current crop of compilations reviewed



32

Action Pack



4

- Ranarama - the Hewson Mastergame in full!
- Maze Mania - guide Flippo round a series of hazard-filled mazes (complete game)
- Pokes galore! Full details and instructions in this month's Cheat Mode
- Word Pro - brilliant, feature-packed word processor
- Easi-sheet - plan your business (or your bank account) with this spreadsheet
- Powerbase 2 - store all that vital information with this powerful database

ACTIONPOCK

HOW TO LOAD YOUR COVERTAPE

Amstrad CPC 464, CPC 6128, CPC 464 Plus
APRIL 1992

AMSTRAD ACTIONPOCK
complete game HEWSON Ranarama
ACTIONPOCK complete game MAZE MANIA full business suite
ACTIONPOCK MAZE MANIA Meaning Business

All programs transfer to disk - full instructions on the tape

Ranarama

1 This is one game we've been trying to get on the covertape for months, readers, and within seconds of loading it up you'll see why. Ranarama is like no other game we've seen, it scored 91% on its original release (AA21) and it's quite astounding. It's a role-playing game and a shoot-em-up and an arcade adventure. Gauntlet is the game it can best be compared to, and even then the similarities are few.

The aim of the game is to start at the top level of the dungeon and defeat each warlock you encounter. Once you've waxed every guardian on that level, you can take the escalator to the next level down to battle another (tougher) crowd of them. It is easy to get side-tracked when the monsters start appearing - remember, seeking out and destroying the warlocks is the name of the game (I thought it was 'Ranarama' - Ange.) Stop interrupting, you don't like games anyway.

Keep moving from room to room, readers, as you will come across more energy crystals and warlocks if you keep treading new ground. Map everything out if possible (use Pause) - this will help enormously when you die in a horrible manner and have to start again.

Ranarama is set in a labyrinth of underground rooms. The game area is bigger than a very big thing.

2 Those black squares are Glyphs that you stand on to enact weird and wonderful magic spells and so forth.

3 Feel like casting a spell? They can aid you in combat, kill the bad guys, heal wounds... everything but play chess.

13 covertape

2 **Maze Mania**

Er, right. Maze Mania is the sort of game you really need to see running.

You're the big ball thing - you have to bounce around a maze painting squares.

3 **Pokes**

This month's covertape is so packed that we've had to split the pokes into two sets. Group A is on side one, Group B is on side two.

GROUP A

DISCCOMP.GS: Graham Smith pokes his nose (and his computer skills) into 30 of the games on the Software Superstore 50 Game Disk. He's even thrown in a menu at no extra cost.

GHOSTII.AP: A very unusual poke for Ghostbusters 2 (see Cheat Mode for the details).

GROUP B

HCOLLECT.GS: Infinite all sorts for the four games on the Hanna Barbera Collection.

JBCOLLECT.GS: Some great cheats for the three film tie-ins on Domark's James Bond Collection.

KNIGHT.GF: This cheat, together with the solution in Cheat Mode, means Knight Force on tape need never trouble you again (much).

MONACO.AP: Infinite time for all you Super Monaco Grand Prix drive-em-up fanatics.

Maze Mania

You can't get a much simpler idea for a game than this. Similar to Skweek, Maze Mania is ace. You play the role of Flippo, a strange creature of some kind, and your aim is to change all the squares in a maze from green to red, simply by walking over them.

There are baddies and gaps to jump over, a nasty blocky thing that moves around the maze (you lose a life if you land on it - the baddies only sap your energy). Use SPACE or the Fire button to jump. There are plenty of levels to work your way through. Not taxing, maybe a tad easy, but a great laugh nonetheless. And hey, it's free!

Maze Mania controls

Keyboard or joystick control

Q	Up
A	Down
O	Left
P	Right

AA79 Covertape Returns,
Ablex Audio Video Ltd,
Harcourt,
Halesford 14,
Telford,
Shropshire TF7 4QD

13 covertape

2 **Tape Trouble?**

If you have any difficulty loading the covertape, please try the following:

- Try loading at several different volume levels if you're using an external tape recorder. Computers can be fussy about the volume they will load at.
- Clean the tape heads. This can be done with any commercially available cleaning kit. Or else use a cotton bud soaked in alcohol. Gently rub the surface of the heads and pinch roller to remove that layer of accumulated grime.
- Adjust the cassette recorder's head alignment. The alignment screw is located just to the left of the tape head, and is usually accessible through a small hole. Rotate it a fraction at a time with a jeweller's screwdriver. When the crispest sound is heard, the alignment is spot on.
- Sometimes the tape spools can jam or stick at a critical moment. Check the spools in your cassette rotate freely, if necessary giving the casing a slight tap against a table edge just to make sure.

If, after trying the all of the above, you still can't get the tape to load then you can return it for a replacement. Send the tape, along with an SAE to:

AA79 Covertape Returns,
Ablex Audio Video Ltd,
Harcourt,
Halesford 14,
Telford,
Shropshire TF7 4QD

3 **Easheet. [RUN"EASIPROG.BAS]** Fancy doing some accounts? You'll be wanting to use Andrew Hodgson's spreadsheet then. Fortunately, he's got more than one copy of it. He's got over 37,000 copies of it in fact, and you now own one. Simply enter your figures into the 'cells' on screen, using the cursor keys to move around. Hitting '8' ('8' on the numeric keypad if you've got a 464) will give a list of the available features and commands.

Powerbase 2 [RUN"PBASE.BAS] A database allows you to keep records (lists of customers, addresses of friends or club members, etc), sort them, arrange them, and specify a number of different characteristics (fields) for each record. The various options are explained on the menu screen. Powerbase 2 has been supplied by Robot PD, 2 Trent Road, Oakham, Rutland LE15 6HF - purveyors of public domain software to the rich and beautiful (send SAE for catalogue).

13 covertape

Disk owners read this

If you have a disk drive, you'll only ever have to load from the tape once - all programs are transferred easily to disk.

Insert a blank formatted disk into the drive and the covertape at the start of side one into your cassette player. Connect the REM socket if you have one (6128 owners) - it'll automatically stop the tape in the right places when accessing the disk drive.

Load the menu program in the normal way and select the TRANSFER TO DISK option. Follow the on-screen instructions and press a key when the computer asks you to. It's as simple as that!

Should you experience problems you'll be asked to rewind the tape and try again. Don't panic if this happens - simply follow the advice for tape loading troubles outlined elsewhere on this page.

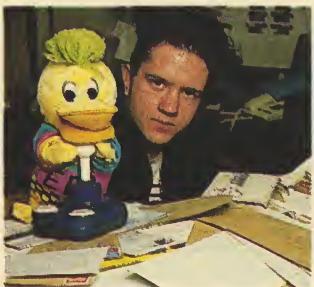
disk offer

Owners of the 6128 Plus are unable to connect a cassette recorder to their machines. If these or any other users would like a copy on disk, simply send this coupon along with a cheque/PO for £2.00 made payable to Ablex Audio Video Ltd to: **AA79 disk offer, Ablex Audio Video Ltd., Harcourt, Halesford 14, Telford, Shropshire TF7 4QD.**

Your name.....

Your address.....

reaction



We've all been on our best behaviour this month readers, what with having the cameras in (for the *Behind the Scenes* feature on page 14). Maryanne wandered round pouting, Ange hid behind a table, Rod looked stern, Adam W looked bemused and ADAM PETERS, er, edited these letters pages. We dish out £10 cash for the best letters received. Write to *Reaction*, *Amstrad Action*, *Future Publishing*, 30 Monmouth Street, Bath, Avon BA1 2BW.

GOING GREEN

I must say, you do churn out a great mag for us, but I do have one suggestion. How about printing it on RECYCLED PAPER, eh? So AA's been around a long time, has it? Well then, it's the older ones who should be setting a good example for the little 'uns to follow – and don't give me that about being on a tight budget, because using recycled paper saves energy and those lovely tall leafy green and brown things called trees.

Naturally, you're all already using 'ozone-friendly' air fresheners for that stinkin' office of yours, and saving your milk bottle tops and coke cans to take to some recycling institution, aren't you, responsible and considerate people that you are? Thank Heavens for that!

Louisa 'Ecologist' Ersanilli

London

Adam: We don't know nothing about paper and budgets and that. Give our publisher a ring and have a word with her, Louisa. We do a bit of the old recycling lark in the office though. Ange collects all our old envelopes to re-use, Adam Waring collects milk bottle tops (yeah, but I don't recycle them, it's my hobby – Adam W), and I recycle all my jokes (what jokes? – ed) from the 1978 *Morecambe & Wise* annual. We're so green, people think we're Martians.



Adam: Probably, yeah. Hang on a minute... aren't you that famous film star woman? Oh no, sorry, that's Raquel Welch. It's spelt differently.

I have written you fourteen letters and not one of them has been published...

George Holliday
Ashford, Kent

Adam: Make that fifteen.

I'd like to order *Outrun Europa* and *Smash TV* from your mail order section but I haven't got any money.

Sid Psycho
Abingdon, Oxon

Adam: Well you're stuffed then aren't you Sid, since it's totally impossible to shoplift by post.

byte-size

Seeing that I put Adam P for cool dude of the year on my 'Giant 1992 Survey', can I have £25 please?

Jack Alcock
Tunbridge Wells

Adam: No, but you can have a badge.

Here's some money to make up for the pay rise that never was.

Seamus Docherty
Westcliff-on-Sea, Essex

Adam: Cheers for the 2p piece Seamus. Don't mock readers, two pence goes a long way nowadays (this two pence, for example, went all the way from Essex to Bath).

On Saturday 25th January I saw the picture of Adam W snogging shown in *Blackmail Corner* (AA77) on Going Live at 11.14am.

James Coupe
Sutton Coldfield

Adam: We think you must be imagining it James, but you certainly got someone round here very worried (so well done)!!

If you ever see Edd the Duck around, please could you cut off his head and eat him for your tea.

Simon Jones
Biddulph, Staffs

Adam: How dare you diss Edd! Edd is a better duck than you will ever be. What's more he's my best friend (he's your only friend – ed), so I most certainly will not do as you say (besides which, I'm a vegetarian).

angry letter of the month

The last Angry Letter spot ever (sob)

Who does this D Ching person think he/she is?
Pah, if this entrail of a diseased worm lived anywhere near me, I'd tie him/her to a large chair and slowly remove his or her teeth with a pair of scissors. Then I'd unleash the cheese grater, and cover the raw, de-skinned legs with pepper. Then I would consult my CPC's Random Torture Selector on Torture Level 5 to work out what to do next to the scum-sucking swine. Failing that, I would slowly remove Ching's toes with a one-foot mini-chainsaw that my friend would lend me, or else make the slime play Roland in Time for five minutes.

If Ching lived anywhere near me, I would read aloud the entire book *Role-Playing Mastery* by Gary "co-creator of the Dungeons & Dragons game" Gygax, and tie Ching – face down – to the back of a car by his/her laces and drive away. Slowly.

This deluded person has no sympathy from me. What sort of person spells 'graphics' with an 'F' and an 'X'? He/she obviously has a puerile brain. Or something like that.

Doc Marten boots and felt-tip pens? I know what I'd like to do with a pair of Doc Martens and it isn't painting. And are you saying the edge-of-the-circuit board connectors are not robust? Do you regularly break them or something? They may not be as good as the connectors on the Amstrad Pluses and the CPC may not be full of hidden compartments like an Amiga or PC, but my CPC has an expansion port with Rombo Rombox and DD-1 interface plugged in the back and it doesn't complain. Of course, if I had to use my CPC like a grappling hook to climb down a sheer surface, then perhaps the printer ribbon might break or snap the printer port, but I have never had to do this yet.

Thank goodness GAC got on the coverpage – now I can forget about having to use that ghastly Lens Lok thingy that I have with my other copy. I hate Lens Loks nearly as much as I hate D Ching.

David Hodder
Peterborough

Is it not about time that the letters page got back to being a letters page, and not just a platform for folk to verbally bash one another?

Perhaps, if Craig Brewin (AA77) and Michael Davies (AA73) et al want to criticise and re-interpret each other's letters and opinions, then they should write direct to each other, missing out Reaction completely.

I feel some of the blame has to lie with Adam Peters (yeah, you!) for allowing this "debate" to continue as long as it has. Those letter writers are no longer commenting on the Amstrad scene, but only on each other. Yes, let's debate the male-orientation in computing, let's criticise the editors of AA for allowing the use of expletives (such as "crap" and "get") in replies and reviews (I don't feel such words belong in AA – maybe in the retarded Viz) and let's discuss the decline (or not) of the CPC. But let's not trash each other through the pages of Reaction.

Le Trinibocks

Monarch's money misery

Tropical Tracker

I'll stick to sterling

I'm keen on Keen

Grass is always greener

TOP TIPS

groundless slagging? Maybe. Maybe not. Given the choice, we'd prefer to carry witty, incisive, well thought-out points of view in place of mindless tirades of violent threats. But we can't give ourselves that choice, Len, that's down to the people who write in.

Swearing in AA? Aha, here's another little can of worms. The two words you list are the ONLY 'swearwords' we use in the mag. "Crap" is the weakest word still construed as being a swearword. It is used by everyone from Wogan interviewees to *Smash Hits* reviewers. "Get" isn't a swearword, it's a verb meaning "to obtain". It is the 'acceptable' version of another word which is a swearword.

Part of our job is to be critical (of games, of hardware, etc). We live in an era where low-impact swearwords have become the universally-used basis of criticism in every corner of society. No-one uses the word "rubbish" to describe something that isn't any good any more. The weakest of those alternatives that are actually used is the word "crap".

If we want to criticise a game (for example) then we have to use a credible word to do so. Older readers may grimace a bit but as far as popular culture and young people (at whom the games content of this mag is inevitably aimed) are concerned, the word "crap" is no longer a swearword. The English language is changing all the time and the word "rubbish" meant 20-25 years ago.

We won't print "bl***y". We won't print "b*****". We won't print dozens of words that all of our readers use in everyday conversation, because we do monitor our content. Around two-thirds of the letters we receive at Reaction include words we refuse to print. The magazine Viz, based around the strongest swearwords in existence, sells 1.2 million copies an issue and is our readers' second favourite magazine (after this one).

Our argument is that we need a genuine word for criticism ("crap") and a genuine word for abuse ("get"). The 'non-swearing' equivalents have been replaced in common usage and are no longer able to fulfil the required role. So we choose two very weak swearwords and change the spelling of one of them. The alternative is to appear very 'out of touch' in the eyes of our readers.

Is that a good argument? Or a not very good one? That's this month's Reaction debate, folks. Write to The Swearing Debate at the usual address. As ever, it's your decision...



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three members of the Commodore Format staff wielding large vegetables, thought to be of the marrow family. Whilst we are waiting for Adam to regain consciousness, his assistant, the popular children's TV character *Edd the Duck*, will take over replying to readers' mail.

ANGRY POET OF THE MONTH

You cluster of illiterate wazzocks! You bunch of artless, hypocritical, pathetic buffoons! You gang of old biddies, brain dead and blinking daft... What do you mean by not giving "that Obvious Bod's" excellent verses a prize? Tom Ash be blowed - just because you've got a name that rhymes with "cash"... I think the Bard of Hanwell is terrific!

Obvious Pseudonym
Hanwell, London

Edd: Squeak squeak squeak squeak squeak. Squeak. (Editor's Note: Unfortunately *Edd the Duck* doesn't speak English. He just squeaks a lot. Sorry.)

A COMPLAINT

I have a twelve year old daughter whom I have so far managed to shelter from the evils of society, but

yesterday, whilst she was reading *Amstrad Action* (without my permission I might add) she was subjected to the most disgusting tongueing sesh I have ever seen in my life, involving Adam Waring, who is far too young to be indulging in such things and ought to know better.

Frankly I am disgusted by the increasing levels of violence, gratuitous sex and poems in *Amstrad Action*, but I have nothing better to do with my time than to read magazines which I later complain about.

If you want some decent poetry, look no further than this letter:

Oh what is wrong with England?
It's going to the dogs.

And your issue seventy-seven,
Was all about flippin' frogs (magazines)

Really, in this day and age we should be listening to the great politicians of the day, like Margaret Thatcher or Michael Foot, and buying British.

I am a hideous fool. Forgive me.

Ms J Grace
Brentwood, Essex

Adam: You're forgiven. And here's ten quid, while you're at it. Go away. Oh no, I haven't left enough room for the AA Guide to Europe. Darn.

peter's postbag: consoles

Worley's World

This man Peter Worley has got some prettely strong opinions - but he's certainly generating lots of mail. Which is why we've given him his own little slot in Reaction. There's no room for anything from Pete himself this month (*hurrah!* - AA readers). Write to: PETER'S POSTBAG, Reaction, at the usual AA address...

Yes, I could have taken the easy way out and got a games machine for my son at Christmas. Yes, it would have been cheaper than the 464 Plus I got in the end. Yes, a games machine loads faster - instant play but boring. My sister's kids are getting bored with theirs already, because they can't afford to buy the games the kids like and DEMAND. Me, I can buy a game and at not much more than pocket money prices.

With a computer you can have just as much fun with your kids, learning how to compete with each other, not just with games but with programming and, most fun of all, typing in AA Type-Ins, each trying to better the other. So I get about a million syntax errors. Who cares? If an old dog like me can have fun and learn, just think what the kids can get from a computer. Twice the fun without smashing, stealing or anything else to get the latest craze (or its price).

M Copplestone
Whitby, N Yorks

Personally speaking I think Peter Worley should open his eyes (and brain) and take a good look at a console and a CPC. If (and I doubt it) he has any sense he will notice a big difference. Believe it or not, consoles do not have a keyboard. Thus the buying public will also notice this. If they

want "games only" loving offspring, they'll buy a console. However, if they would like games, WP, programming, BASIC/machine code literate offspring then I'm sure they'll buy a CPC. The general public is not as stupid as Peter Worley thinks.

Nicky Hampstead,
Peterborough

Give kids a break! Firstly, they have to go to school all day (where in most schools nowadays they study some serious computing).

Secondly, they have to put up with parents (God



The Sega Megadrive: A brilliant piece of kit or a brain-destroyer? Have your say...

help them), and then just when they're about to have a nice relaxing game on their Nintendo, along comes Peter shouting that they're ruining their lives by having a rest.

And isn't Peter insulting anyone who doesn't own a computer by saying that without computer skills they haven't a hope of getting a decent job? What a load of rubbish! There are plenty of jobs out there that don't involve computers.

I think it's the individual's choice whether they want to use computers/consoles for fun or serious purposes, and if people are stupid enough to spend £30 on a game then more fool them!

Amanda Hall,
Wickford, Essex

I agree totally with Peter Worley's argument against the current flood of consoles - I am personally amazed at how well they have sold, especially the Gameboy, where the price of its games is unbelievable. I feel this is just a trend which will wear off when the children are screaming for another £25 to buy a game they could play on the Spectrum for a couple of pounds (and find more enjoyable).

Mark Thacker,
Leicester

Adam: What a lot of letters on the subject of consoles. Peter certainly seems to have struck as many raw nerves as he's hit hammers on the head. (What exactly does that mean? - ed.) It means that we've got another big batch of readers' letters about consoles in next month's edition, together with Mr Worley's response to some of the arguments you've raised. Reserve your copy today.

THE TYPE-INS DEBATE

(Edu) 360-FOR-13-99000-10-8977
(Edu) 370-FOR-13-1-POKE-1, 94L(*8*)+8
(Edu) 380-FOR-13-1
(Ob) 390-RETIN
(Ob) 400-9414-C8-06, 09, 21, 25, 28, 01, 14, 00, ED, 8
1, C2, 25, 00, 1, 28
(Ob) 400-9414-09, ED, 52, 29, 11, 42, 00, 15, SE, 23, 5
1, C2, 25, 00, 1, 28
(Ob) 420-9414-14, 00, C3, 44, BC, 32, 42, C9, 12, 00, C
0, 00, 00, C5, 1, 28
(Ob) 430-9414-72, 01, 04, 06, 74, 47, 19, 75, 00, 6
1, 07, 09, 00, 1, 28
(Ob) 440-9414-09, 00, 01, 00, 05, 00, 03, 00, 0, 00, 0, 00, 0, 0
1, 00, 03, 00, 0, 00
(Ob) 450-9414-17, 00, 06, 00, 08, 00, 00, 07, 00, 0, 0
7, 00, 71, 00, 00, 00
(Ob) 460-9414-14, 00, 07, 00, 03, 00, 04, 00, 00, 00, 0, 0
1, 00, 00, 00, 0, 0
(Ob) 470-9414-09, 00, 00, 00, 00, 00, 00, 00, 00, 0, 0
0, 00, 00, 00, 0, 0

■ **We're putting the tape - I haven't got time to type them in. A few of you were concerned about us replacing the commercial software on the tape with the Typos. Don't panic, there was never any question of replacing something else to chuck the Type-Ins on the tape.**

Anyway, being the wishy-washy liberals that we are, we've come up with a brilliant (though we say so ourselves) compromise solution. The Type-Ins will stay in the mag, but each batch will also appear on the covertape two months later. Brilliant, eh? There's still every incentive to type them in, but if you can't be bothered (or can't get them to work) you don't have to go without. Are we clever or what? (Don't answer.)

SLY SNAPSHOT

I would like to submit this photo for your new Blackmail Corner. You see, my friend Jamie hates having photos of himself being taken, and when he came round to my house just before the New Year I had a one in a million chance of taking a photo of him. I am even prepared to bribe you to print it. I have enclosed a homemade badge.

Marcus Durham
Farnham, Surrey

Adam: Thanks for the badge Marcus, but to be honest the photo is a bit of a let-down. Whilst taking photos of camera-shy people is exactly the sort of anti-social behaviour we like to see our readers getting up to (along with frightening small children and greasing old people's walking frames), the end result is very disappointing.

If you're going to take a picture of someone who doesn't want their picture taken, at least get their blinckin' face in shot Marcus. I mean, frankly

photo compo



this could be anybody. Philip Schofield? Colonel Gaddafi? Joanna Lumley? Sort it out Marcus, and send us a proper picture of Jamie if you can get one (trying climbing up the drain-

pipe of his house and snapping him through the bathroom window).

This does give us an excellent idea for a competition, though (oh God - ed). We want you to send us photos of

people reading AA. Not just any old people, though, we want pictures of celebrities or people in uniform. So if you live near any famous people, or aren't embarrassed about propositioning nuns or coppers or some such, then get snapping. There is, of course, a sumptuous, near-priceless prize up for grabs for the sender of the best pic (we don't know what it is yet, but it'll be fab - trust us).

Oh yeah, and if that sounds too much of challenge you could always take a pic of yourself or a mate reading the mag, and send that in instead. Providing the mag is being read in an unusual place; up a tree, in a canoe, on top of a fast moving vehicle, anything like that. Got that? Then grab that camera and seize your chance of fame beyond your wildest dreams (sort of). Send your snap, plus details of who it's a piccie of, to Photo Compo, Amstrad Action, Future Publishing, 30 Monmouth Street, Bath, Avon BA1 2BW. In that order.

crap poem of the month contest

Flaming Poetry

We tried folks, we really tried to get into your poetry, honest. But, well, call us artless Philistines, call us mindless spawn of the video generation, call us smelly old poo bags; call us what you will, we simply couldn't absorb more than a couple of stanzas before having to run off and lie in a dark room for a few hours.

So how can we judge the Crap Poem of the Month contest if we can't read any of the poems? Bit of a problem that. Then Ange explains something she read about in one of her books on witchcraft and, ha ha, we have the solution - we will simply put your poetry to (da da da da) the Judgement of the Flames!

So we slip off down to the Future Publishing car park, pile up a few copies of *Commodore Format*, douse them in petrol and set the whole lot ablaze (don't try this at home kids, remember we're professionals).

The game works like this: If we can survive the opening lines of your sonnet without screaming then kudos to you, most excellent poetic dude. If nausea gets the better of us, though, we let the flames do the judging. If your poem burns then it's crap, if it doesn't then it's, er, probably written on flameproof paper or something. Got that? Right, let's go...

First up it's Lee Woodward of Abingdon, Oxon. Lee's effort begins like this: "I love to play with my CPC/Because of the graphics, the sound, etc." Fell at the first hurdle there, Lee. When you read the abbreviation 'etc', you read it as 'et cetera' not



■ **We don't know art but we know what we like. And what we like most of all is throwing readers' poems on to a fire.**

'ETC'. So it doesn't even rhyme. And on the fire it goes.

Next up is Antoni Hanus of Huddersfield. How does this one go then? "When I went to the shop there was a dead cool mag/Better than school or smoking fags." Saying nice things about AA is a smart idea Ant, but saying that smoking is cool is a very stupid idea. Smoking is not cool at all - it kills people. And 'smoking', incidentally, is exactly what your poem has just started to do...

We're going to be a bit more sympathetic to Dolph, seeing as he is stuck on a "windswept, uninteresting lump of peat, rock and penguin crap" called The Falkland Islands for another four months. It's actually quite a good poem Dolph, but

we're interested to see how well one of them ultra-thin Armed Forces Aerogrammes burns...

"C&VG is crap, ACU is too/If you want a cool mag, then AA is for you." What a brilliant opening couplet. Unfortunately, Dylan Goding of Norwich made one small error of judgment; Garfield notepaper (sizzle).

Timothy Bennett of Hackney, London (the rave centre of Britain, fact fans) sent us a very committed attempt. It scanned, it rhymed, it was witty, entertaining and very well put together. It was about Hampton Court Maze. I had a very nasty experience in Hampton Court Maze when I was fourteen. Sorry.

Well none of you have managed to avoid (or survive) the Judgment yet. And indeed none of you will. The Hard Bard of Camberley, Surrey refers to Rod as "the bearded prat" and (s)he would have won a prize but I got overruled (and clipped round the ear - ed). Robert Iddon of Croston, Lancs wins points for dissing Spectrum owners, then spoils it with a long soliloquy about doing his homework. Only squares do their homework, right kids?

And that's that. Oh, there was someone who wrote about their mate Dave, and someone else who wrote a 20-liner about our postal address. That hot yellow stuff is devouring the whole lot even as we speak. Oh well, things can only get better (we hope).

Keep sending us those verses, readers. Send 'em to Crap Poems at the usual address. Next month's batch will be fed to a rabid Doberman.

NEWS... NEWS... NEWS... NEWS... NEWS... NEWS... NEWS...

amscene

AA SALES UP!

What's all this about a declining Amstrad market? Amidst an atmosphere of gloom amongst the software houses, *Amstrad Action* has just posted its highest ABC since 1989!

The latest figure is 37,120, some 2,000 readers up on the previous 6-month's sales.

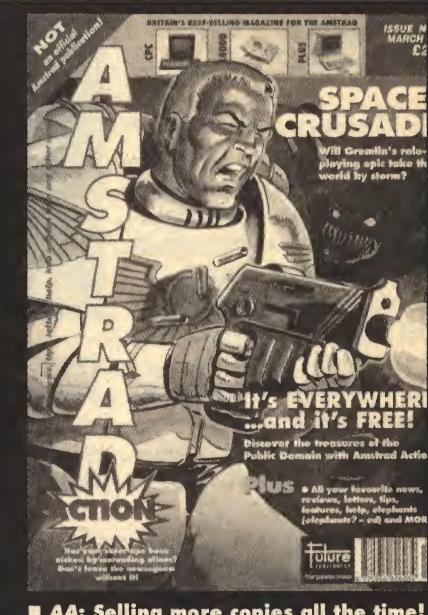
It just goes to show two things: that Amstrad owners are amongst the most loyal there are, and that the Amstrad itself has got a long way to go yet! Indeed, if current trends continue, within a couple of years the Amstrad may be the most popular 8-bit machine on the market. (As well as the best.)

Many full-price software houses are thinking of pulling out of the Amstrad market - others have done already. But the industry reaction to AA's lat-

est figures has been terrific. Nick Wild of Psygnosis (the company behind the 16-bit sensation Lemmings) said to us: "I was really impressed with your ABC. I couldn't believe it." Psygnosis plans to release Lemmings on the CPC later this year - the company's first Amstrad release for three years.

Whatever happens in the Amstrad market over the coming years, with a readership of this size, one thing is for sure - as long as you lot out there want the latest and the best Amstrad info, *Amstrad Action* will be here to supply it!

'ABC' stands for Audit Bureau of Circulations. A magazine's ABC figure is universally accepted as the measure of a magazine's sales. Any magazine worth its salt publishes ABC figures - if there's no ABC, it means the mag is ashamed to print it!

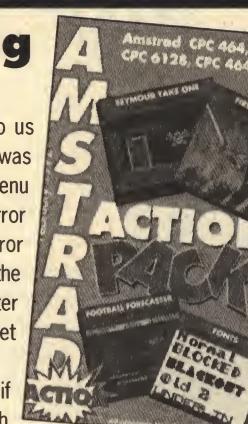


■ AA: Selling more copies all the time!

Trouble loading Firelord?

We've had lots of people complaining to us about the AA77 covertape. The problem was with Firelord - try to load it from the menu screen as usual and you get a "read error b". The weird thing is, you get this error before the machine has even reached the first Firelord file (the game comes after Seymour Take One on the tape)... and yet Seymour loads perfectly!

Even more strange was the fact that if you wound most of the way through Seymour and then tried to load Firelord it would work (thanks for that info, Mr. Betts).



■ Firelord: loading problems explained.

posed to identify the file it's supposed to load, then carry out an error-checking process on that file. However, the Amstrad checks all files it runs through. This wouldn't normally be a problem, but the firmware bug means that if the file it finds is longer than the file it's looking for, it still stops doing the error-checking after the shorter distance. Therefore, it returns the wrong result and the machine displays a "read error".

Don't despair, though! Firelord will load perfectly if you wind through Seymour. It will also load perfectly if you simply ignore the "read error".

Dave is on the verge of sorting out this little bugger even as you read this.

Cheap Seikosha

Seikosha has produced a new 9-pin printer aimed at those on a tight budget. The SP1900 Plus offers "an outstanding price/performance ratio". We take that to mean it's good value.

Costing £155, the SP1900 Plus runs at 192cps in fast mode, 160cps in draft and 40cps in NLQ. For your money you also get a built-in "semi-automatic" sheet feeder, plus the usual tractor feed.

To find out more about the new Seikosha, call the company on 0753 685873.



■ Seikosha steps in with a new 9-pin printer for the budget-conscious.

NEWS... NEW

Join the club!

According to golfing equipment manufacturers Prosimmon, the CPC is the bee's knees! The company distributes a 'Matchplay System' which provides golf pros (every golf club has a resident 'pro') with a computerised club designing package to tempt the punters (or do we mean 'putters')

It's based around a mono 464, and uses "the science of physics and metallurgy, combined with the rules of geometry, leverage and human anatomy, to establish precisely the right combination of club length, shaft frequency and club swing-weight". Crikey! - and we thought golf was just a case of knocking a ball into a few holes.

It's nice to know the CPC is at the leading edge of sporting technology...

■ Thanks to David Hannuell of Enfield for this gem... have you seen any unusual uses for a CPC?

COMPO WINNERS

NOW WE ARE SIX COMPO (AA73)

We got quite a few entries for this one, but only one of you managed to get all of the questions right. Well done **David Ward of Southmead, London**. You win a Marks & Spencer birthday cake with a clown's face on it. Adam Peters will deliver it the next time he's in London. Er, unless we eat it first.

Answers: 1(a), 2(a), 3(b), 4(a), 5(a), 6(c), 7(c), 8 (any of them, it depends what day it is), 9 (again, any of them will do), 10 (your choice not ours).

Answers: There aren't any.

CRAP HAIRCUT COMPO (AA75)

The entries were so crap that we burnt them all. So the Terminator 2 tape goes to the first person who writes in with the best idea for a name for Adam P's pet mouse (it's not a pet as such, it lives under my sink - Adam). Closing date, er, next Thursday.

I THINK I'M PRETTY SMART COMPO (AA74)

About a dozen entries. Ten of these were brave attempts - every one was

more competition winners in next month's **AmScene**

The Addams Family

ocean

a magazine in the making...



Behind the scenes at Amstrad Action

AA is currently selling more copies than at any time in the last three years. Declining CPC market? We think not! To celebrate, we thought we'd come clean and show you exactly how this magazine is put together. ADAM PETERS peels back the covers – glasnost, here we come...

We lied to you, readers. All that talk of AA Towers with its fabulous glass spires, a separate office for each section of the magazine, and an army of two dozen secretaries sorting through the mail. It was all a big pokie. Amstrad Action really has only three full-time staff of its own, and they inhabit an office measuring 9' by 18' – about the size of an average kitchen.

There are other people that work on the mag, including Maryanne (who sits in the Your Sinclair part of the room, but works for both mags), Adam Waring (who sits round the corner, where his Public Domain mag is based), our out-of-house freelancers (Phil Howard, the Balrog, etc), and a few people who handle certain areas for more than one magazine (publisher, advertising manager, production people, etc). But the sight that visitors to the Future



Future Towers. This building is home to AA, as well as thirteen other (almost as good) computer mags.

offices have described to them as "Amstrad Action" is Rod, Ange and yours truly, in someone's kitchen.

Studying the Future. AA is published by a company called Future Publishing, which was set up on June 1st 1985 by an out-of-work editor (Chris Anderson) with £1,000 in the bank. Amstrad Action was the company's first magazine. Today Future has nineteen magazines, fourteen of them computer titles, and sells more computer games magazines than any other company in Europe.

The company is based in Bath, though the mail order and subscriptions departments are based at a warehouse in Somerton (the Somerset village where Future was founded). The company occupies four buildings in central Bath, three of which are linked together. The Amstrad Action office is on the



■ It's that bloke from Codemasters (Richard Eddy – ed) with some blurb.



■ Rich and Rod check out Striker and the Crypts of Chaos. Watch out for... too late.

top (third) floor of the largest of these buildings. This is where the magazine comes to life.

About our equipment. Amstrad Action, like around 95% of all High Street magazines, is produced mainly on Apple Macintosh computers. These are incredibly expensive (around £1,000 for the basic writers' ones, £3,500 for the big colour ones the art boids use), as is the software (£700 per program), but they allow almost total control over how the words and pictures come together on the page.

Rough pages are printed out on a black and white laser printer (£3,000 if you're interested). Once they're completely finished they are printed out on the Future Publishing Linotronic, a dead flash laser typesetting machine (yours for £40,000), on transparent film.

There is one film for every mono page, but four for every colour page. With the colour pages, each film represents a different colour; one for black, one for cyan (light blue), one for magenta (purple) and one for yellow. These four colours, when mixed, can make up any shade of any colour imaginable. The Linotronic works out what percentages of black, cyan, magenta and yellow go to make up each colour on the page, and then prints at the relevant (percentage) shades on each of the four films.

The four films are all standard black print on transparent background, but when the printer prints



■ Here's the system AA uses to get screenshots from the CPC to the Mac.

Who does What



ADAM PETERS
(Staff Writer, 21)

Art Editor? Production Co-ordinator? Circulation Manager? Very daunting-sounding job titles, but what (if anything) do these people actually do? We hear from some of the characters involved in transforming an issue of Amstrad Action from a few idle thoughts to the brill magazine you're reading now...



ADAM WARING
(Consultant Tech Ed, 25)

I write most of the copy (words) in the magazine. This involves chasing up games from software houses, playing them to death when they arrive, reviewing them, researching for main features and the Buyers' Guide, replying to readers' letters in Reaction, sorting the mail, losing things (a speciality), and making the tea (making the tea? – ed). I check through the copy (removing all the libel from Adam P's stuff) and put the text on to grids for the art people to do their arty things to it.



ROD LAWTON
(Editor, 33)
I plan the issue, draw up flatplans, commission features, schedule magazine production, organise the covertape programs, plan covers, juggle budgets, sub articles and correct proofs (rough copies). I check through the copy (removing all the libel from Adam P's stuff) and put the text on to grids for the art people to do their arty things to it.

Being Economical

No day goes by in the AA office without us encountering a letter or survey form complaining that "there's too many adverts in the mag" and "there should be more pages in it". "Why can't you have over 200 pages like Amiga Format?" a number of people have asked.

The economics of it is this: magazines are founded on advertising revenue. A single page of advertising pays for the printing of not only itself, but also three pages of editorial. Therefore, when the amount of advertising coming in falls, it hits the magazine financially, forcing a reduction in the number of pages.

Software houses and dealers only have a limited amount of money available for advertising, and many have chosen to concentrate more on the 'sexier' 16-bit market and the current consoles fad. Advertising for the 8-bit mags has inevitably fallen as a result, resulting in smaller issues across the board (AA, ACU, all Spectrum and C64 mags).

It's not all bad news though – we are doing our best to keep the amount of editorial (non-advertising) in the mag as high as possible. Despite having 25 fewer pages of ads in the past two years, we have managed to keep the editorial loss to only ten pages.

This issue of AA, whilst only a 60-page issue, features more pages of editorial than any other issue since June of last year! It just goes to show you can't judge a mag by issue size alone.

The thinner issues is an unfortunate but unavoidable fact of economic life. However, we are trying our hardest (honest) to cram as much as we can into the available space. Hence the redesign, Technical Forum, Beginners' Basic, Public Image, Buyers' Guide, etc.

And you're not really getting that much less than 16-bit owners. Sure, Amiga Format has 168 pages more than AA, but how many pages of editorial more does it have? Answer: Only 31 (over 60% of the mag is ads!). It's a pretty good deal when you look at it that way!

technical FORUM

Welcome to *Amstrad Action's* new *Technical Forum* section, where our Consultant Tech Ed ADAM WARING keeps you up to date with every serious aspect of the CPC. Got a techie problem? He'll sort it out. Got a hot tip for your fellow CPC users? It could earn you a tenner... Write to: **Technical Forum, Amstrad Action, Beauford Court, 30 Monmouth Street, Bath, Avon BA1 2BW**

COLOUR CO-ORDINATION

I am a 464 Plus owner but wish to upgrade it by buying a disk drive. First of all, which disk

drive do I get and where from? I know about the DDI-1 but am looking for one the same colour as my new Plus machine - white, not black.

Please sort out this problem for me as I am in desperate need of a disk drive.

A Gibbons
Bridgewater, Somerset

I'm afraid you don't have much choice when it comes to colour co-ordination as the DDI-1 is needed as a first drive.

Things are furthermore complicated as Amstrad didn't make the Plus machines particularly upgradeable; you can't plug a DDI-1 in without modifying it first.

The problem exists because the disk ROM is present in all Plus machines, even the 464s. When you plug a DDI-1 interface into the back, the ROM inside that clashes with that of the computer's. It needs to be disabled first. It's possible to buy already modified DDI-1s from a number of suppliers that advertise in *Amstrad Action*. Try **WAVE, 1 Buccleuch Street, Barrow-in-Furness, Cumbria LA14 1SR. Tel: 0229 870000.**

SOME BROTHERS DO 'AVE 'EM

I have had a CPC464 for five years and I have had no trouble with it - until, that is, my younger brother got his hands on

it and put a magnet on it...

Now none of my tapes will load. I would like to know if there is anything I can do for it?

Shaun Turner
Manchester

First thing to do is give your brother a darn good punch on the nose. It sounds like the tape heads need demagnetising. You can buy a tape to do the job, or a local radio repair engineer should be able to sort the problem out for you.

ON THE TELLY

Please help! I am referring to a letter that was printed in AA68 where someone wrote

in asking for info on how to get a 7-pin RGB cable that will connect his CPC to his Hitachi TV. In your reply, you said that a company called Lightwave might have one. I wrote to them as I'm in the same situation, but they wrote back saying they didn't have such a cable. Do you know any other companies that might sell them?

I desperately need one as my green screen monitor's days are numbered! I hope you can help.

Theresa Murison
Tiverton, Devon

If you can't find a ready-made cable in the shops, then you may be able to get a computer store or electronics shop to wire one up for you. Take the TV's instruction leaflet along with the computer's manual, showing the relevant pin-outs, along with you. Hope you're successful!

WHICH COMPUTER?

I wonder if you can help me? I own an Amstrad CPC464 and was thinking of

upgrading to a 464 Plus. But I've heard that some games are not compatible with the Plus. Is this true? If so, is the Plus machine a waste of space?

Give me your honest opinion - should I keep my computer?

Anthony Howe
Humberstone

There are some compatibility problems with certain older games, though this certainly affects only the minority. All new games will work on the CPC and Plus alike.

Whether you upgrade or not really depends on whether you're likely to buy any cartridge games - and these are in short supply nowadays. You already have a fine machine and if you can live without carts then I think you'd be better off sticking with what you've got. The choice is yours...

COLOUR VISION

I am the owner of a CPC464 with a green screen monitor. Can you please tell me where I can buy a colour monitor?

Aidan Reynolds
Cheshunt, Herts

I have asked around in many shops but my effort was wasted as no-one was able to help me.

Amstrad were concerned. If you bought a green monitor then you were stuck with it.

It may be possible to pick one up second-hand, though, and occasionally mail order suppliers get hold of a batch of reconditioned ones. Check out AA's ads.

Alternatively, you can link your computer to a colour telly. You need an MP-2 or MP-3 modulator. Again, looking through the adverts is your best bet.

ON THE MENU

With regard to your menu-driven cover tapes, I can see that this is an improvement for 464 owners when loading from tape.

However, having transferred tapes to disk I would like to maximise disk usage by deleting unwanted files and storing two or more cover tapes per disk.

Whilst I can rename the Menu file using the REN command, each Menu calls up the numbers 1, 2 etc and so the programs themselves cannot be renamed. Is there a mechanism for overcoming this problem or am I stuck with one cover tape per disk?

M J Frostick
Rugby

One way round the problem is to store different cover tapes in different User areas on the disk. As long as they're in separate User areas, several files with the same name can be stored on one disk. You could have a program a little like this saved in the main directory with the contents of the cover tapes stored in

other User areas:

**10 INPUT "Which covertape do you want? ",a
20 IUSER,a
30 RUN "MENU"**

Save the contents of cover tape one to user area one and so on, and by modifying the above program to suit your needs, you'll be able to store several tapes on each disk.

CART CRISIS

I am the owner of a 6128 Plus and am happy to report that it has been 100% reliable since I bought it (unlike certain friends' Amigas and STs...). However it seems to me that even your magazine has given up on the cartridge system and that sooner rather than later the CPC will become obsolete.

I have found that the machine's major disadvantage is that it's not IBM

compatible. I have noticed that it's possible to get a BBC emulator for a PC, and as I was hoping to get a 386 or 486 in the near future, I was wondering if there was such a thing as a CPC emulator. If there is would it work on a machine of these speeds?

Also I have seen that it is possible to get a TV tuner for a CPC monitor. Is it possible to get one for the Plus monitor?

B Smith
Abingdon, Oxon

I'm afraid that you're out of luck - I'm not aware of any CPC emulators for any machine.

But don't go out and bury your computer just yet... there's plenty of life in the old dog yet. And as for the cartridge situation, though they didn't take off in the way that Amstrad (or us at AA) would have hoped, we may see one or two further releases yet. Check out Ocean's Space Gun adverts...

There's no TV tuner available for the Plus, though it should be possible to modify a CPC tuner to work with this monitor.

A SLICE OF PI

I have written a little program on my 464 that prints all the even numbers that have been multiplied by PI up to 1,000:

**10 MODE 1
20 FOR n=1 TO 1000
30 PRINT n*PI
40 NEXT n
50 END**

Is it possible to print them so that they are numbered?

I would like the display to look something like this:

**1) 3.14159265
2) 6.28318531
etc...**

HELP

This is a brand new section - Technical Helpline. If you've got a problem too tough even for the great (his words, not ours) ADAM WARING to solve, this is the place. One of our 37,000+ readers is bound to know the answer.

Or maybe you've got some particular area of expertise that you think our readers might benefit from?

The address to write to in both cases is:

**Technical Helpline
Amstrad Action
Future Publishing
30 Monmouth Street
Bath
Avon BA1 2BW**

This service is completely free, but we DO ask that you DON'T try to sell your kit here (the Small Ads page is the place for that) and that you DO include both your first name and telephone number (sorry, but we can't print full names and addresses).

OK? Well here's this month's Technical Helpline section...

Wanted: 6128 rom and 8-bit printer port for the 464, preferably with manual.

Andrew, 0533 606786 weekdays 3:30pm-4:30pm, any time on Sundays

Wanted: first disk drive for (old model) CPC464. Will pay up to £80.

Jonathan, 0780 783073

Offered: limited advice on hardware problems.

David, 0793 532417

Help offered on programming, GAC and the Amstrad in general. Also contacts wanted in any country, 100% response.

Len, 0254 382349

Wanted: can anyone help? I am looking for a manual for the DDI disk drive. I am willing to pay any expenses.

John, 0495 227183

Book wanted: The Digital Research CP/M Plus Manual for CPC6128 and PCW Machines.

Colin, 0786 75982

Wanted desperately! Amstrad CPC6128 Firmware manual (Soft 968) to buy, borrow, hire etc. Also wanted: Anatomy of CPCs book.

Plus!! Help offered on any aspect of CPC - programming, hardware and so forth.

Pete, 0533 886039 after 6:30pm



Hi! I'm back after what seems like ages! Have you missed me?

Well, I've missed writing for AA, and was delighted when Rod asked me to come back and help some of you poor 'lost souls'. I'm here to answer your very basic questions, so if your queries at all technical then I don't want to know! (I'm sure Adam would be delighted to hear about your techie teasers, though...)

Anyway, enough of the chit-chat. Who's our first reader in distress...

Electric Studio a ring (0582 595222). Its *Light Pen* comes complete with software. The address is P.O. Box 96, Luton LU3 2JP.

Home accounts is next on the list. She wants to use the computer to "do something useful like entering our incomes and outgoings each month and monitoring our financial situation."

There are a number of accounts programs that will do the sort of thing you want, but SD Microsystems' (0406 322522) *Home Finance* is tailored for domestic use, rather than the running of huge multi-national companies!

You'll have to make your first outgoing £14.95, though!

AMIGA GAMES ON THE AMSTRAD?

Mark Perry from the lovely-sound-

Top tips

AUTO TYPING

I have been reading your magazine for some time now and have noticed that a lot of people have trouble with the Type-Ins checking program Type-Writer. The general problem seems to be with lines 40 and 100, and occurs because people answer the questions incorrectly.

I have put together a replacement for the old version which checks the type of computer automatically - no more awkward questions have to be asked! It's been tested on a 464 and should work on the Plus machines without problems. Alter the Type-Writer listing as follows:

```
40 flag=0
110 j=&7fff: k=&4500: POKE j,81: POKE
k,93: OUT &7f00,&c5: jj=PEEK(j): kk=PE
EK(k): OUT &7f00,&c0: IF jj=81 AND
kk=93 THEN POKE a+8,&a4
```

James Chaney
Patching, Sussex

POKE CITY ARIZONA

In AA76 Ron Rose asks whether there is any way of checking which drive was being accessed. The information is held at address &a700 - a '0' signals drive A and a '1' drive B. You can also POKE the address to change the drive. Here are some other useful addresses:

&A6FF - normally contains zero, but when poked with a non-zero number it disables the disk ROM.

&a701 - holds the current user number. Usually this is between 0 and 15, but any number up to 255 can be used. Do not use &E5 though - this signifies a deleted file and any data stored here is liable to disappear at any time!

&B1C8 - current screen mode. Poking this address will not actually change the mode, but it will fool the computer into thinking it's operating in a different mode, causing any further text and graphics to appear corrupted.

&BB18 - calling this address causes the computer to wait until a key is pressed. &BB02 - resets the colours to the defaults when called.

&BDEE - this is used by the computer's firmware to check for a reset when CTRL, SHIFT and ESC are pressed. Typing POKE &BDEE,&CO you can disable the soft reset and ESC keys.

E A Blackshaw
Bedford

review Fun School 4
£12.99 CASSETTE, £16.99 DISK • DATABASE

This is the fourth in the Fun School series of educational games from Database, and follows a similar format to earlier releases. There are three programs in the range, featuring characters designed to appeal to different age groups. There's Teddy for the under-fives, Froggy for five to seven year olds and, er, Spyey for those between seven and 11 years of age. Each pack comprises of six games, all with a very definite educational slant. The idea is that your kiddie has fun while learning - they won't even realise. Sneaky, eh?

The basic format is the same throughout the three packages. The games are usually simple to control, in many cases just two keys, Space and Return, are used. In other games the cursor keys have been implemented and full keyboard skills are necessary in a couple of the spelling games for the older age groups.

Big, bold, bright graphics feature prominently in all games. The animation is excellent and has improved very noticeably from the earlier versions. Presentation is good on the whole, and after a while even the youngest child should be able to play with the computer unsupervised, thanks to logical and simple keyboard layout.

Most games have neat reward sequences for getting things right - there's nothing worse than educational programs where a wrong answer provides more entertainment than a correct one. Even the manuals are excellent with great little stories that link the games together.

There are a couple of minor grumbles - a couple of typos have crept in. Ok, these find their way into the most vigilant writer's copy (you should know - ed) but for an educational program this shouldn't happen. Then again, whether the average five-year-old's going to notice a missing apostrophe is doubtful.

Some of games do get a bit tricky - especially the typing game in the Five to sevens pack and the quiz program in the over-sevens - I've no idea how long the Great Wall of China is. Maybe it's time I went back to school!

Fun School 4 contains a wealth of educational material, disguised as games that will appeal to even the fondest of shoot-em-up fans. Who said learning can't be fun?

UNDER 5s

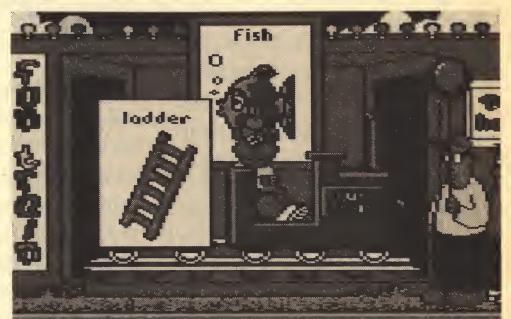
Addition Oh no! Sums! Help Ted with the arithmetic before he and his chums can go out to play. The first level's fairly straightforward; you simply have to count the number of objects on the blackboard. Things get trickier higher levels where there's adding up to be done...



The first game for the under-fives is simple arithmetic. You have to add up the items on the blackboard before you can go out to play.

Teddy Paint Ah, this is more like it. It's picture-drawing time. Slap down the shapes on the screen to create your masterpiece. Well, not quite, but it's better than the purple and orange crayon scribble that young kiddies normally produce.

Fun Train A train circles round through a fairground ride, carrying a picture in its carriage. Does it match the picture behind it? Only Teddy can tell! This is all very well, but can't we have a go on the ride itself? Oh, please, please, please. I'll hold my breath until turn purple!



Does the picture on the back of the train match the one on the top? On later levels you'll need to be able to spell, too.

Teddy's House More painting, this time it's a spot of house decorating. Choose the colours to paint Ted's house. In later levels you're asked to select specific colours to paint the objects with. Just you wait 'til Daddy Bear gets home and sees what you've been up to...

Teddy's Karaoke Yo, kids! Get down to the acid groove. Ted's at a rave and has to sing along to the KLF. Well, not quite Ted has to holler to the mike to the sound of such hardcore hits as Humpty Dumpty Sat On A Wall and the unforgettable Grand Old Duke Of York.

Teddy's Books Ted's had a big day, and the poor little mite's knackered. But Dad insists on reading a goodnight story before he'll be counting sheep (or kids or whatever bears eat). Teddy has to name the number of the book Dad's reading before he'll let him sleep.

5 TO 7s

Library Freddy Frog's been lumbered with sorting books in the local library to keep him quiet. Knew it was the wrong place to practise yodelling. There's a stack of books, and they all have to be placed into the correct order. As the levels get harder, more things need to be taken into account such as authors' names rather than simply book titles.

Shopkeeper It's down to Sainsbury's to get the week's shopping. The shopkeeper's a bit fussy about giving change and so you have to calculate the correct coinage to buy the various goods on sale. Ohh, the price of fish nowadays...

Log Cabin It's time young Freddy settled down and built a log cabin to make little Freddys in. Only thing is, it's not hammer and nails that hold the logs in place, but sums instead! Answer the problems properly, and the



Oh, that's a bit of a tricky one. Select the log with the correct answer to add it to the side of your house. Beats bricks and mortar any day.

frog throws the lumber into place. Get it wrong and timber! it's time to try again.

Basketball This is more like it! It's fun in the gym, only the missing letter or number sequence has to be worked out to successful bag baskets. Get it wrong and you're given additional clues to help you work it out.



Convert the currency to win the undercover clothing. And you need to - you'll stand out like a sore thumb (un)dressed as you are.

Spy Travels Uh oh, it's Geography time. But there's no getting out of it, if you're to be a secret agent then you're going to have to learn where the good guys live as opposed to the evil pinko commie scum. Various games teach you where's where as you travel the globe.

Desert Dates You're asked questions and have to chip open the stones of a pyramid with the correct dates. You have five hammers, for each wrong answer one gets broken. It gets more specific on higher levels, but it does suffer from repeating question syndrome.

Opposites It's swimming time, the only problem is before Freddy's friends can take a dip he has to give the opposite answer to a word. He does this by hopping around lily pads looking for the correct answer. It gets decidedly difficult in the later stages, with plenty of similar words with similar meanings to choose from.

Typing Freddy's favourite chocolates are Malteasers. Unfortunately, the crocodile's favourite are Malteasers surrounded by Freddy. To avoid this terrible fate you have to type as fast as your three-fingered limbs can go or you'll end up on the dinner plate. Starts off with easy keyboard-bashing, but later on you have to type full sentences and it reaches speeds which that would give a touch-typist trouble.

7 TO 11s

Proportions Count up the spies and answer questions about how many have shoes (or hair or false teeth) and work out the proportion. You can use percentages and fractions to help work it out, but have to resort to decimals to do the sums. It's actually trickier recognising who's wearing what, than doing the calculations. Later levels include hunting around the prof's lab to count objects there.

Spy Quiz It's a tough mission. The spy has to scale a wall and answer some pretty tricky questions to climb higher and higher to get the secret plans. And the questions get quite tough on later levels, even for grown-ups. Eeh, it's a wonder what they teach them kids at school nowadays. The questions do tend to repeat after a fairly short while, which is a pity.

Exchange rate A sort of strip game, this, only in reverse. The young 'tec has to work out foreign money problems, converting currency between countries, in which case he gets to wear an additional part of his disguise. There's a calculator in case he gets stuck, but he can only use it a maximum of five times.

Timetable Typical! At the airport on the way to a secret destination (so secret that you don't know) and the plane's late (or early - now there's a first!). You have to work out when the flight's actually going to take off from the times on the departure board.



Convert the currency to win the undercover clothing. And you need to - you'll stand out like a sore thumb (un)dressed as you are.

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► Thanks! By the way, what happened to Ask Alex? Has Rod fired her or something?

John Harrington
Horley, Surrey

It's a simple matter to modify your program to do what you want. Alter line 30 to read:

30 PRINT n;" ";n*PI

The semi-colons are separators that allow a list of several items to be printed on the same line.

And as for Alex, she's back! She was getting a little busy with her college work and so had to give up the column for a while, but we've persuaded her to write a smaller version of her section.

MAC SUITS YOU

I have an Amstrad CPC6128 and I use the school's Apple Macs a lot. I was wondering if there was any software or hardware for the Amstrad that would provide a menu system similar to the Mac's instead of the boring screen the Amstrad provides when you switch it on.

If a system like this exists, could you please tell me how much it costs and where I can get hold of it?

Ewan Cameron
St Andrews, Fife

There is a program that will do just what you want, and the good news is that it's public domain! DW Desk provides a Mac-like desktop for the Amstrad. For your copy send £6 to the author David Wild at DW Software, 62 Lascelles Avenue, Withernsea, North Humberside HU19 2EB. Or check out the Public Domain section on page 42. Most of the libraries mentioned should have the disk in their collections.

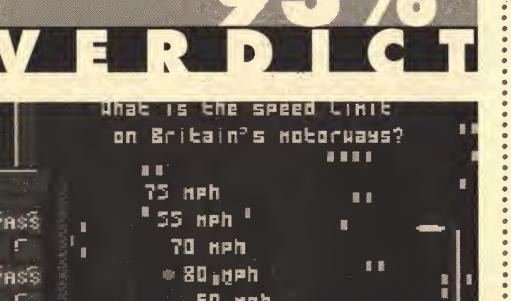
good news

■ Graphics certain to appeal to kids
■ Educational yet fun!
■ Well written manuals with entertaining stories

bad news

■ Question and answer games repeat themselves
■ Some games taxing, for adults
■ A couple of typos

93% VERDICT



NOT ON TAPE I purchased a DK 'Tronics 64K memory expansion about a year ago for my CPC464. I thought it would widen the range of software available for my computer - I have already bought one program that I could not have used without this extra memory (OCP Art Studio, tape version). However, I have made a few queries about programs that use the extra memory such as Stop Press and Protext. They say on the covers that they require 128K of memory. I have 128K, but cannot use them because

multiple choice questions have to be answered to climb a little higher up the wall. Let's see... 80 seems reasonable to me.

mastering machine code

Greetings fellow programmers! This instalment, we begin to venture into the weird and positively fascinating world of interrupts. Firstly, though, we complement our feature on sound programming last month with a little look at graphics in machine code. That mighty games hacker ANDY PRICE delves deeper into the realms of his assembler...

Built-in to our CPCs are some ROM routines which do many varied and wonderful things like print characters, make sound and generally take care of some of the more basic needs of the Amstrad. These routines are called **Firmware** routines and make our life a lot easier.

The firmware, luckily, has some routines for basic graphics functions. These include line drawing, pixel plotting and moving commands. Such similar commands available in BASIC are DRAW, PLOT and MOVE.

What are these routines and how do we access them? Simple, just use the CALL command and examine Listing 1, which shows you how to access every graphics command and which registers to use...

Remember that the maximum range of co-ordinates is 0-399 for y coordinates and 0-639 for the x coordinates. Also, when using the Firmware, register DE holds X and HL holds the Y co-ordinates.

Firmware graphics summary Below is a table showing the address of each of the firmware's graphics routines and their purpose. For details on which registers to use, have a look at Listing 1!

ADDRESS PURPOSE

&BBBA	Initialise Graphics VDU
&BBBD	Reset Graphics VDU
&BBC0	Move to a pixel position, absolute
&BBC3	Move to a pixel position, relative to present position
&BBC6	Get the current Graphics cursor position
&BBC9	Set Graphics origin (default is 0,0)
&BBC0	Get Graphics origin
&BBEA	Plot a pixel, absolute
&BBED	Plot a pixel, relative to current position
&BBF0	Test a pixel position, absolute
&BBF3	Test a pixel position, relative to present position
&BBF6	Draw line to an absolute position
&BBF9	Draw line relative to present position
&BBFC	Place a character at current graphics position (similar to &BB5A except for the graphics cursor (pixel precision))

The mysterious world of interrupts We can really have some fun with interrupts! You can also do some very impossible things with interrupts,

which are not possible without them (er, I don't think that makes sense, Andy - ed), for example, Split Mode Displays (See my Type-in March 1989)!

"What is an interrupt?" I hear you cry... Well, an interrupt is a routine which is executed when the interrupt is ready to do so, not when the CPU decides it is! Basically, the interrupt **interrupts** the CPU to do whatever it wants to do. Interrupts are normally timed using the system clock, which means that about every 1/300th of a second we can execute a program do to something devious, i.e. to update the screen with two different modes (Split Modes - see Listing 2).

It's all a matter of timing!

There are two types of interrupts, namely **maskable** interrupts which can be interrupted and **non-maskable** which cannot be interrupted (for example, a soft reset by pressing CTRL, SHIFT and ESC).

Now then, before any of you flash know-it-alls out there start writing to me saying that poking address &0000 with &C9 (RET) will prevent a soft-reset, WRONG!! The normal routine is directed to address &0000 when those keys are pressed, using the OUTPUT port at address &7F89 will still execute a soft-reset which CANNOT be interrupted. I just thought I'd let you know!

Anyway, where were we? Oh yes. Probably the most used interrupts from a programming point of view are **time interrupts**. The time interrupt occurs every 1/300th of a second and is available to us in five forms:

The Fast Ticker Block - This occurs every 1/300th of a second and is intended for short period timing. However, as a matter of interest, this is what I used to put about 3 different screen modes in 6 places on the screen (to split the screen directly in half with two modes, see Listing 2).

The Frame Flyback - Occurs every 1/50th of a second. This is used for routines like paper and border and flashing.

The Ticker Block - Occurs every 1/50th of a second. The keyboard is scanned every ticker interrupt and is a very general purpose interrupt.

Sound Interrupt - Occurs every 1/100th of a second and, believe it or not, drives the sound routines! (No? You don't say...)

The System Clock - This counts clock ticks every 1/300th of a second. This holds the number of ticks passed since your computer was switched on. You could write a routine to hold the current time by using the system clock. I hope you don't intend to leave your computer on for more than 166 days because the system clock resets after that time! (Yet another useful piece of information!)

A simple interrupt For the purposes of this instalment, I have chosen to use the **Fast Ticker Block** because it is the only routine fast enough to be capable of producing Split Mode displays.

Now then, to put your program into the fast ticker block, you have to use the firmware routine at &BCEO (KL NEW FAST TICKER). This produces an interrupt every 1/300th of a second. To add any program to the Fast Ticker, Frame Flyback or Ticker blocks, the Firmware routines take the following general format:

HL holds the address of the fast ticker block

B contains the event class

C holds the ROM selection

DE holds the address of your program

The reason I am only going to explain the Fast Ticker to you is because interrupts are very peculiar things to grasp. I have produced Listing 2, the Split Mode Display program, so that you can see what you are capable of using interrupts and so that you can see how they work...

Right then, it's time for an explanation of the registers above, which are needed to introduce an interrupt. HL holds the address of the fast ticker block. This is a 9 byte section of code for use by the computer. As you can see in Listing 2, I have located these at the end of my program. The event class, held in B, in Listing 2 has been set to &81. This is because any number less than &81 is a negative number and thus the interrupt will not be installed. &81 means that it will install my interrupt once because it decrements the event count each time and &80 is a negative number (-128). C has been ignored in our program because we are only concerned with our programs in RAM, not other people's in ROM. DE just holds the address in memory of your program.

How to alter the mode Altering the mode is quite straightforward. In Listing 2, we have a sec-

tion of code like this:

```
DI      ; disable all interrupts
EXX    ; alternate register set
RES 1,C
SET 0,C ; mode 1 - see explanations in
          ; text
OUT (C),C
EXX
EI
```

To change to MODE 0:

```
RES 0,C
RES 1,C
```

To change to MODE 1:

```
SET 0,C
RES 1,C
```

To change to MODE 2:

```
RES 0,C
SET 1,C
```

Remember, this only occurs for a specified count (3 or 4 in my program for half of the screen, depending on the machine you have). You can do this for counts of, say 1 or 2, to get three modes on the screen simultaneously!

Just have a fiddle around with the program until next month where I can explain some more features of the Split Mode program. Sadly, I've run out of space this month...

● Next month, I'm sorry to say, and the months thereafter, I have been cut down to 1 page! However, it does mean that we can handle our machine code in easy chunks. We will carry on looking at interrupts next month. Until then, happy split moding!

LISTING ONE

NEW_FRAME_FLY: EQU #BCD?

```
ORG #6000
; ROUTINE TO PRODUCE
; MODE 2

; LISTING ONE:
; Simple Graphics using the Firmware

CALL #BBBD    ; reset graphics
LD DE,0       ; x coordinate
LD HL,0       ; y coordinate
CALL #BBC0    ; Move to an absolute graphics
              ; position
LD DE,639
LD HL,0
PUSH HL      ; preserve value in HL for
              ; later
CALL #BBF9    ; draw a line relative to
              ; current position
POP DE       ; get value 0 from stack into
DE
PUSH DE      ; store 0 on stack again
LD HL,399
CALL #BBF9
LD DE,-639
POP HL       ; get 0 from stack
CALL #BBF9
POP DE
LD HL,-399
CALL #BBF9
RET
```

DI ; SCR MODE CLEAR, just
 ; to test whether
CP #F7 ; it is a CPC464 or a
 ; CPC6128
JR Z,C464
CP #17
JR Z,C6128
PROG: LD HL,FRAME_BLOCK ; for computer's use
LD B,#81 ; only install
 ; interrupt once
LD DE,ROUTINE ; address of main
 ; routine
CALL NEW_FRAME_FLY ; install interrupt
RET

; ROUTINE TO PRODUCE
; MODE 1

ROUTINE: DI ; disable all
 ; interrupts
EXX ; alternate registers
RES 1,C
SET 0,C ; mode 1 - see
 ; explanations in
 ; text
OUT (C),C
EXX
EI

DI ; alternate registers
EXX ; change to mode 2 -
 ; see text
JR Z,C6128
LD HL,DELAY_ROUTINE
CALL DEL_FAST_TICKER ; remove routine
; for block
RET

C464: LD HL,#BDEC ; alter
 ; firmware
 ; routine
LD A,#E ; MODE CLEAR so
 ; that when
 ; the screen is
 ; cleared it
 ; jumps to a
 ; different place
 ; in the lower
 ; ROM

LD A,#E
LD (HL),A
INC HL
LD A,#B
LD (HL),A
JR PROG

C6128: LD A,#2E ; the same
 ; applies
 ; to the
 ; 6128's firmware
 ; routine

LD A,3
LD (SWITCH_DELAY+1),A ; delay
 ; for screen is 1
 ; tick less than
 ; a CPC464 for
 ; the CPC6128

JR PROG

LISTING TWO

ORG #6000

```
; Split screen into two modes
; Mode 1 in the top half of the screen
; Mode 2 in the bottom half
; by ANDY PRICE - Mastering Machine Code,
; April 1992
; Original Code, Jan 1989
```

```
NEW_FAST_TICKER: EQU #BCE0
DEL_FAST_TICKER: EQU #BCE6
```

SWITCH_DELAY: LD A,4 ; 4 for half
 ; screen in a
 ; CPC464
LD (STORE),A ; 3 for half
 ; screen in a
 ; CPC6128

LD HL,TICKER_BLOCK
LD B,#81
LD DE,DELAY_ROUTINE
CALL NEW_FAST_TICKER
RET

DELAY_ROUTINE: LD A,(STORE)
DEC A
LD (STORE),A
OR A
RET NZ

FRAME_BLOCK: DEFS 9
TICKER_BLOCK: DEFS 9
STORE: DEFB 0

ACTION TEST



You start level 1 with temporary invulnerability. Very temporary...



Oh dear, Prehistorik goes to that great primordial swamp in the sky



You'll find most of the food you need to finish the level in the caves



Eek - looks tricky, doesn't it? Clue: jump into the water just behind you for bonuses...

Prehistorik

TITUS • £10.99 CASS, £15.99 DISK

Prehistorik is a (cave)man with a mission. Never mind "feed the world", this primitive man has realised he's got to feed the tribe first. He sets out to take on the worst the prehistoric world can throw at him...

Which include Gubba-Gubbs, Balor and Bobor, Pyro-Tax, Swordy, Chimp-Agogo and many more ultra-cute beasties. Don't stand and gawk at them too long, though, 'cos they're all out to get you. Let any of them touch you and you lose valuable energy. Lose enough energy and you die.

Fortunately, you've got your faithful club at your side. If any of these prowling beasties comes too close, just give it a good few smacks and pick up the points.

This game isn't really about points, though. Don't forget, you've got to feed your starving tribe. So while you're busy fending off mon-

SECOND OPINION

"It moves slowly and the combat is sluggish. It looks good, but it just gets too bogged down when things start happening."

ADAM PETERS



Look at all those caves! Yeah, but look at all those monsters too...



That monkey in the tree is a real pain - it throws coconuts at you



Look out for that hairy yellow thing - it spits at you! (It's pretty easy to kill, though)



That food looks tempting, but you've got to get past that horrible spider first

graphics

68%

Looks wonderful... until it starts getting hectic

sonics

50%

A reasonable tune, but no in-game fx

grab factor

90%

It looks like you're in for a whale of a time...

staying power

45%

...but looks aren't everything, unfortunately

64%
VERDICT

3.5" DISK DRIVE

Our SONY 3.5" disk drives are fully compatible with the CPC range of computers and will format to 178K. With the addition of Ramdos or Romdos, they will format to 800K!

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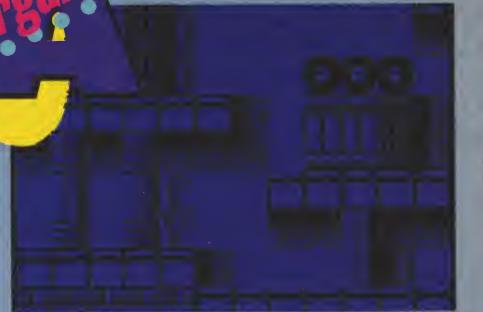




■ First floor - coppers, crates, mad nuns, records, trees, menswear, haberdashery, and a guitar. Elevator going up...



■ Them things top left will be balloons. You'll be wanting to hitch a lift up on one of them to get some records. Indeed.



■ Hurrah! It's level two and there's three rather deformed-looking records just waiting to be picked up by our hero.

THE BLUES BROTHERS

TITUS/PALACE • £10.99 CASSETTE, £15.99 DISK

"It's 106 miles to Chicago, we've got a full tank of gas, half a packet of cigarettes, it's dark and we're wearing sunglasses."

"Hit it."

Er, no. Hang on a minute. In actual fact, *The Blues Brothers* isn't a film licence. It's only a character licence. What does that mean? It basically just means that the game doesn't have any photos from the film on the box, and it doesn't follow the plot of the film. Which is no real problem, as a lot of 'genuine' film licences don't either (*Hudson Hawk*, *Live & Let Die*, etc.).

SECOND OPINION
"Crikey! - bit blue isn't it? Is this monitor lead working, Adam? ...Well, OK, given the great gameplay and good soundtrack we'll forgive it."

ROD LAWTON

Taking the role of either Jake or Elwood, you have to platform it around five different levels. At the end of each is some item or other

FIRST DAY TARGET SCORE

Complete the first two levels

you need to stage your concert.

You have three lives, your current state of health being indicated by the number of hearts at the top left of the screen (one life = three hearts). You can get extra hearts by collecting the records that hang around the game area in their hundreds. A hundred, incidentally, is how many you need for each extra heart.

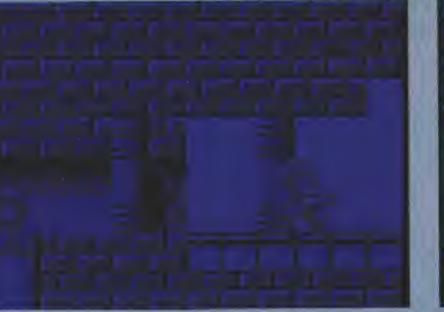
There are also balloons and umbrellas around to 'give you a lift',

together with bonus hearts and presents. Some of these presents increase your energy. Most of them stun you instead, leaving you at the mercy of any enemies in the vicinity. Great present, folks. It's that blinkin' Auntie Susan with her perverse sense of humour again, isn't it? (No, I don't think so - ed.)

There are enemies parading around the place, including coppers, gardeners and nuns (and why not - Barry Norman). Pick up boxes and throw them at the baddies - it's the only way you can kill the rotters. You



■ It's one of those gardeners (or, I think they're Illinois Nazis actually - ed). Oh, listen to Mr Smarty-Pants clever clogs.



■ Oo-er, it's a construction worker. He looks in a good mood, but I think we'd better avoid him nonetheless.



■ Yikes! Things are starting to get a bit hectic. Rod (left) and Adam P (right) gang up on poor Mr Blues. The rotters.

tips
tactics

LEVEL ONE: COPPERS AND CLOUDS



Every now and then we're going to include a few tips and tactics to get you started in a game. Here, we show you how to work your way through Level One...

1 WALK THIS WAY

You're in a building. You're on the ground floor. There are a lot of boxes where you start from, and very few later on. So you will need to pick up a box, move right, splat one of the baddies, then go back to where the boxes are, and so on. It's also a good idea to take things slowly as well, perhaps hanging around for an enemy to appear on the screen you're on, rather than racing onto the next screen and possibly walking straight into one. Try to always have a box in your hands whilst moving onto unexplored screens. It is possible to jump the foes though, so go for that instead if you're a bit on the impatient side.

the building. You can use these to collect the records that are hanging around in mid-air up above. You should be able to collect them without too much trouble. When you hit the ceiling, the balloon bursts and you float back down again. On one of your balloon trips, try to land on the floor just above the one you take off from (the one with two boxes on it), as this takes you to four screens packed full of records. There's a couple of nasty baddies too though, including a manic canteen lady (box her).

3 HITCH A LIFT

A service lift takes you from level three to level four. There is a small network of conveyor belts, tunnels and service lifts that takes you from here to the roof. These lifts are fairly safe, with the exception of the first one. There's a nasty copper standing by it shooting a lot, and there's a big hole below. Mis-time your jump and you end up back of the first floor again. Once you reach the roof, head left, avoiding the gar-

deners, till you reach a tree. Jump to the top to collect the box, then jump right a couple of times to land on a cloud.

4 HEAD IN THE CLOUDS

The cloud section is particularly troublesome. Apart from some dastardly nun-like angels, there's also the problem of jumping from cloud to cloud. The nuns can be boxed, but you can only jump over them safely if you are on the same horizontal plane than them. With the first nun, hang around lower down (where she can't hit you with her throwy things), and she'll gradually back off. When there's enough room, jump twice - once to get alongside her, once to leap over her. When you're on the far right of a cloud screen, it is difficult to know how far away the next cloud along is. So you don't know whether to do big jump or a small one. In all but one case, the big jump is the one to go for. Once across the cloud bit, grab the guitar you see. Ta da, end of level one.



■ Hello. We're up a tree, about to take to the clouds.

don't jump as high with a box in your hands. Nor can you swim or crawl with one.

In later levels, you encounter more in the way of platforming. Lots of little blocks to jump between, whilst avoiding various hazards and ever more bizarre types of enemy.

The Blues Brothers is an excellent game, similar in a lot of respects to last month's *Hudson Hawk*, but with a lot more in the way of exploration involved, plus the added bonus of the 'record collecting' idea. The graphics are a bit dodgy and it's very easy to avoid the foes by simply leaping over them. There is enough of a challenge here to keep you plugging away till you complete it. As platform games go, this is one of the best. Buy it today and help save that orphanage.

Adam P

win the video

Cor blimey, what do you know, our mates at Palace have given us THREE copies of *The Blues Brothers* video (worth over £15) to give away in a competition. Brill-o-fab.

So what do we want you to do? Simple. Using any clothes and props you can find (try your dad's wardrobe when he goes out), we want you to dress up as one of the Blues brothers (pork pie hat, suit, dark glasses, whatever you can find).

Get someone to take a photo of you - if you can get someone else to be the other brother, please include them as well - and send it, together with your name, age, address and a list of your hobbies, to Blues Brothers Compo, Amstrad Action, 29 Monmouth Street, Bath, Avon BA1 2DL. The three best entries received by 20th May 1992 will win their senders a spanking new copy of the vid. Hurrah!

RULES

- 1) Employees of Future Publishing and Titus/Palace, their relatives, their pets, their lodgers and the strange old man who lives down the end of their road, aren't allowed to enter.
- 2) The film is a 15-certificate, so don't enter if your folks are going to have a go at us if you win.
- 3) The editor's decision is final.
- 4) So there.



graphics

81%

Great two-colour graphics, neat single screen scrolling but little in the way of animation.

sonics

56%

Everybody Needs Somebody plays continuously (and irritatingly) throughout. No spot FX.

grab factor

94%

A brilliant platform-em-up, featuring lots of exploration. It's very easy to get into.

staying power

96%

Five large levels means you won't finish it in a hurry either. The difficulty level is spot on.

95%
VERDICT

COMPILATION ROUND-UP



Compilations, eh? Whose idea was that then? The first mega big compo was US Gold's *They Sold A Million*. In recent times, the trickle of compilations has turned into a veritable flood. Recent trends have been more towards 'concept' compos, where three or four games of a particular type (eg sport sims, coin-op convos beat-em-ups, etc) are bundled together – one of the first of these was the ten game sporting pack *Game, Set and Match*. Another recent development has been the emergence of budget compilations; the Kixx Multimixx packs and Codemasters Quattro jobs, for example. Compos offer excellent value for money and they're certainly here to stay. ADAM PETERS action tests a few recent examples...

SOCcer STARS

EMPIRE • £12.99 CASSETTE, £17.99 DISK

Hurrah! This is what we call a brilliant compo. Four of the best footie games of all time (see Buyers' Guide: Games on page 56) all bundled together in one reasonably-priced pack.

The best of the four games is *Emlyn Hughes' International Soccer*, which is also the only one



featuring a side view of the action (the other three are all overhead jibbies). It's fairly slow, but very easy to see what's going on, the strategy/team selection bits are dead good, and brilliant passing moves are easy. Excellent.

Microprose Soccer includes 6-a-side and



And *Gazza 2* isn't bad either. *Soccer Stars* is a vital buy for CPC footie freaks.

compilation

- Kick Off 2 87%
- Microprose Soccer 90%
- Emlyn Hughes Int Soccer 94%
- Gazza 2 85%

95% VERDICT

NINJA COLLECTION

OCEAN • £9.99 CASSETTE, £15.99 DISK

Another from the Ocean stable, the Ninja Collection doesn't set a place at its table for Mr Variety. All three of the featured games are reasonable but not brilliant ninja-em-ups.



Double Dragon is the oldest and wrinkliest of the *Double Dragon* series of ninja games. *Double Dragon 2* is riding high in the budgie charts even as we speak. *Double Dragon 3* was reviewed last month. And if you've played one you've played them all.

Dragon Ninja has also enjoyed a large sortie into the budget charts recently (meaning that a lot of you have probably already got it). It's a pretty good game, with different platforms, passing traffic and stuff like that to liven it up.

The version of *Shadow Warriors* on *The Ninja Collection* is, strangely enough, identical to the version of *Shadow Warriors* on *2 Hot 2 Handle*.

Nice one Ocean – there's a really neat way to mark off people who are thinking of buying both packs...



compilation

- Double Dragon 59%
- Shadow Warriors 74%
- Dragon Ninja 73%

61% VERDICT

Movie PREMIERE

ELITE • £14.99 CASSETTE, £19.99 DISK

A mixed bag of bananas from the Walsall dudes, the best of the lot is the chart-topper *Teenage Mutant Hero Turtles*, and as we all know even that isn't exactly the most inspiring game in computing history.

It's a platform beat-em-up featuring those four Pizza-guzzling dudes that everyone's forgotten about. (What pizza-guzzling dudes? I don't remember any pizza-guzzling dudes – ed.)

The other games are pretty mediocre. *Days of Thunder* is a dull racing game based on a dull film with Tom Cruise in it. It's an American NASCAR thingy, and it's pretty slow.

Gremlins 2 is a platform/arcade adventure sort of thing, and it's difficult. Too difficult really. And a bit repetitive in the gameplay department to



boot. *Back to the Future 2* is the real turkey, though. The graphics are naff black and white



ACTION TEST

Spectrum style, the title tune is irritating, the stages are too long, and you will get bored very, very quickly indeed.

There are skateboard riding, puzzle and beat-em-up stages. Full marks for variety – minus a hundred for the actual game.

compilation

■ <i>Teenage Mutant Hero Turtles</i>	65%
■ <i>Back to the Future pt.2</i>	39%
■ <i>Gremlins 2</i>	54%
■ <i>Days of Thunder</i>	52%

50% VERDICT

TNT 2

DOMARK • £12.99 CASSETTE, £17.99 DISK



compilation

DOMARK • £12.99 CASSETTE, £17.99 DISK

This, we believe, is Domark's last ever CPC release. Er, and it's very nobby unfortunately. *Escape from the Planet of the Robot Monsters*,



■ *Hydra* is one of the better games on the *TNT 2* compilation. And it's crap.

aside from the longest title in computing history, also offers isometric-3D rooms, lots of robotic foes, some hostages to release, and an excellent two-player mode. It's the only game on this pack worth owning.

Hydra is a boat-em-up with mega naff confusing graphics and very little in the way of playability. *Skull & Crossbones* is a chop-em-up involving lots of pirates (i.e. blokes with eye patches and parrots, not that spotty geek in the fourth year with all those Amiga games). It looks quite good at first glance, but turns out to be as dull as the dullest thing in Mr Dull's Amazing Encyclopaedia of Dullness. Duh!

And then we come to the real stinkers: *Badlands* has graphics that are dire beyond the limits of human imagination. Like *Super Off Road* on the *2 Hot 2 Handle* compo, it's a *Super Sprint* style race-em-up. But it's total crap. You'd laugh if your computer-illiterate little brother wrote something like this while you were having tea. Commercial release? Pah!

compilation

■ <i>Hydra</i>	37%
■ <i>Skull and Crossbones</i>	42%
■ <i>Escape from the Planet of the Robot Monsters</i>	20%
■ <i>Badlands</i>	15%
■ <i>STUN Runner</i>	31%

34% VERDICT

2 HOT 2 HANDLE

OCEAN • £15.99 CASSETTE, £15.99 DISK

Variety, they say, is the spice of life. So here's a spicy little compo from the Ocean posse, combining a couple of bouts of beat-em-up action, an excellent film tie-in and a reasonable racing sim.

Total Recall is the best game on the pack. Clocking up a Mastergame on its original release, TR is a traditional Ocean film tie-in of five levels;



■ *Total Recall* is an excellent little game in which you play the part of Arnie.



■ It's a hard-to-control race-em-up based around the experts of a chap called Ivan.

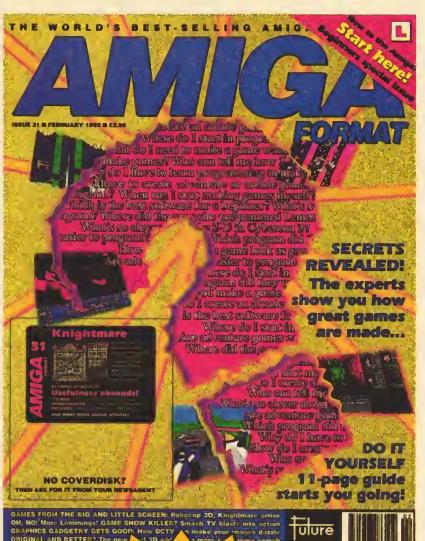
compilation

■ <i>Shadow Warriors</i>	74%
■ <i>Golden Axe</i>	58%
■ <i>Total Recall</i>	89%
■ <i>Super Off Road</i>	67%

72% VERDICT

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Your local Calculus dealer

cheat mode

beat Mode is the place to look for hints, tips and solutions on just about every game ever published! The pokes on the covertape are described in full, too. Got some cheats yourself? Well send them in! We pay £10 for the month's top tips, and £20 for pokes. Send your stuff to: *beat Mode*, Amstrad Action, Beauford Court, 30 Monmouth Street, Bath, BA1 2BW - who knows, fame and fortune could be yours...!

SKATEBOARD JOUST

Chris Bennett of Hertford suggests that if anyone has the game Skateboard Joust (I haven't), press the keys SHIFT, CTRL and SPACE on the title screen, then press 1 or 2, and when you play you will have infinite lives.

LEAVY MOVES

arc Smith of Abbey Hulton has supplied the pass-
word for level 2 of Dinamic's *Navy Moves* - it is
8750.

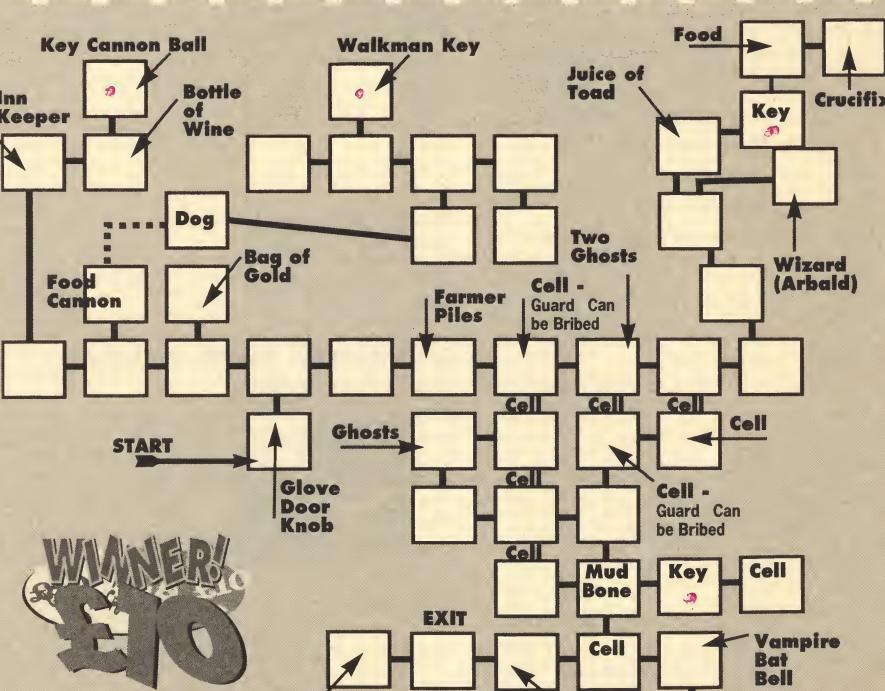


J-LN-SQUADRON

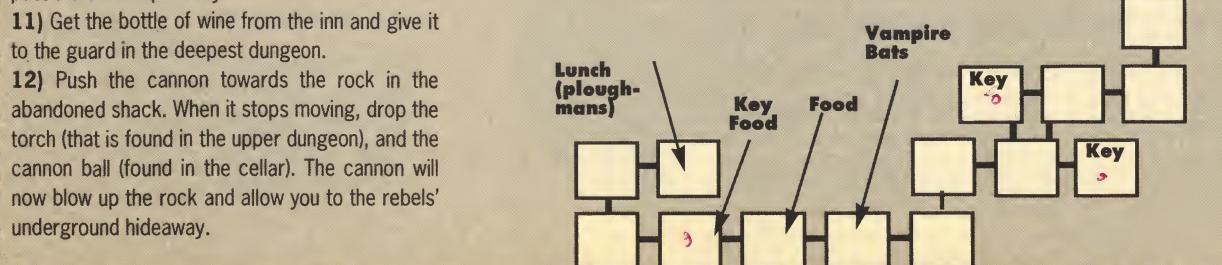
Here's something nice, Simon Stoakes of Heol-Y-Cyw (pronounce that with a mouth full of cream crackers!) Bridgend has a clever way of increasing your chances on US Gold's *U.N. Squadron*. Select a two-player game and put both players on joystick 1. Start the game and move both planes up to the top left hand corner of the screen, wherupon both planes will merge together - you then will have twice the firepower.

Steven Hodgkinson of (Oh dear! I've lost your address Steve, please let me have it, so I can send your prize) has sent us a map of Spike in Transylvania and, to complement his artistic effort, has sunk his teeth into the game and staked out a batch of tips for you to be undead by.

- 1) The door knob is used to open the door to the start screen.
- 2) The ploughmans lunch must be given to farmer Piles. He will give you a pair of wellies, which are needed to cross the muddy patch in the middle dungeon.
- 3) Give personal stereo to the guard by the exit as a bribe.
- 4) Give the juice of toad, spell book, and bat to Arbold the Wizard; they will then turn into a tie.
- 5) Wear the tie to get past the Innkeeper.
- 6) Wear the gloves to ring the bell in the belfry.
- 7) Get the bone from the middle dungeon and drop it in front of the dog in the rebels' hideout.
- 8) Get the crucifix from the church and drop it in the ghastly ghost room. One of the ghosts will drop the spellbook.
- 9) Flick the switch in the central corridor to stop the spikes in the lower corridor from puncturing you.
- 10) Flick the switch in the upper dungeon to get past the broken pathway.
- 11) Get the bottle of wine from the inn and give it to the guard in the deepest dungeon.
- 12) Push the cannon towards the rock in the abandoned shack. When it stops moving, drop the torch (that is found in the upper dungeon), and the cannon ball (found in the cellar). The cannon will now blow up the rock and allow you to the rebels' underground hideaway.



Spike in Transylvania



HELP

Here's a brand-new Cheat Mode section for all those gamesters well and truly stuck on their fave (or not so fave!) games.

We've broken up the Helpline page into queries about games, technical topics and adventures. From now on, if you're stuck on a game, or you simply can't get hold of an old classic, send a postcard (or write on the back of an envelope) to:

Games Helpline
Amstrad Action
Beauford Court
30 Monmouth Street
Bath
Avon BA1 2BW

The normal Helpline rules apply:

DO try to keep it quick and simple – name the game, name your problem, and make sure it's a reasonable request!

DO include your first name and your telephone number. Sorry, we can't print full names and addresses.

DON'T try to advertise 'games for sale' – that's what the Small Ads page is for. This section is for people who need help only.

And now, just to get the ball rolling, is the first batch of readers' pleas...

Has anyone got Sorcery on tape for the Amstrad 464?

Ron, 0582 873267 after 5pm

Wanted: AA mags 55 to 59 or all the cheats in those mags. Will pay good prices for mags. Jim, 081 848 7493

Help please: I cannot get past Level 1 of The Simpson disk game. Debbie, 0504 268797

Help wanted on Bubble Bobble. I don't know the type-in code (CPC464 cassette). Also wanted: TV modulator MP1 (464). Warren, 0533 768765 4pm-9pm

Help please with Sweevo's World. How do you collect a BOO? I have a problem with my TINS, BLOCK & FULL. Angela, 0344 428053

I will offer Slapshot for any help on Hammerfest. David, 0375 843096 outside school hours

Help needed on Batman the Movie and Untouchables. Help given on The Simpsons, Sim City, Kick Off 2, Ghostbusters 2, Back to the Future 2 and Indiana Jones and the Last Crusade. Pete, 0302 855107 6pm-9pm

Please, can anyone tell me what finally kills the Necromancer in Sorcery Plus? Eileen, 0582 873267 5pm-9pm

covertape pokes

Every month we put a collection of game pokes on the covertape. These short programs 'modify' the game code when it loads to give you all sorts of extra goodies, like infinite lives...

Also, where we can we give you equivalent Multiface pokes so that you can get the same effect using one of Romantic Robot's little Black Boxes.

See below for details on this month's covertape pokes, plus instructions on how to use them for first-timers, PLUS some tasty Multiface pokes...

HANNA BARBERA COLLECTION

WINNER! \$10
The very excellent Graham (who we haven't heard from for some time) Smith of Street in Somerset has resurfaced, (nice to see you're back in fine poking fettle, Graham). He has put together a major set of cheats for a couple of popular compilations. First, the Hanna Barbera Collection, which includes the games Top Cat (infinite time and energy), Hong Kong Phoebe (infinite energy), Ruff and Reddy (infinite lives and stops the clock), and Yogi's Great Escape (infinite lives and infinite time).

JAMES BOND COLLECTION

WINNER! \$10
Second up is the James Bond Collection, which includes Live and Let Die (infinite fuel and infinite missiles), Licence to Kill (no damage) and The Spy Who Loved Me (99 lives). Graham is visibly shaken but not stirred...

Multiface pokes for the Hanna Barbera Collection

Top Cat	POKE	EFFECT
7C06	AF	Inf time
7C07	C9	Inf energy
71CD	18	
7472	00	
7473	00	
7474	00	
7625	00	

Hong Kong Phoebe	POKE	EFFECT
0894	00	Inf energy
0895	00	

New Kids Block

1) Load the poke you want from the covertape into your computer.

2) Take out the covertape and put in your game tape or disk.

3) Type IDISC if you are using a disk poke.

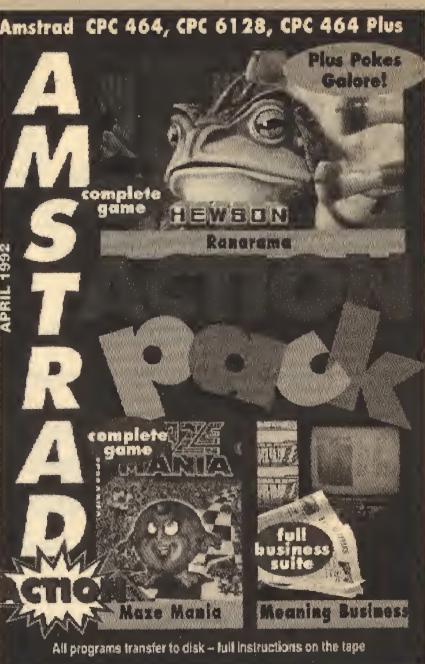
4) Type RUN to run the routine (not RUN "" (CTRL+ENTER) as you normally would)

You should find that the game will load normally, or you will be given instructions what needs to be done.

SOFTWARE SUPERSTORE'S 50 GAME DISK



Good old Graham (is there no end?) has also done a super set of cheats for the Software Superstore's 50 game disk compilation. From a menu you can load and cheat on 30 (yes 30) of the games, including Curse of Sherwood, Energy Warrior, Apprentice, Xcel,



Multiface pokes for the James Bond collection

Live and Let Die	POKE	EFFECT
7401	00	Inf fuel
7402	00	Inf missiles
7495	00	

Licence to Kill	POKE	EFFECT
1674	00	No damage
A4F4	00	
A6E5	00	
A7EE	00	
ABF0	00	
FEED	00	

The Spy Who Loved Me	POKE	EFFECT
0EFD	63	99 lives

SOFTWARE SUPERSTORE'S 50 GAME DISK

Andy Price, machine code magician and compulsive cheat of downtown Dunstable is never short of a poke or seven. This time he has had a go at 3 disks: Lucasfilms' Nightshift, for which he has supplied invulnerability, Super Monaco Grand Prix, which gets infinite time but sadly no Multiface version, and Ghostbusters 2.

The disk version of Ghostbusters 2 has been given a clever twist by Andy. The cheat allows you to watch the storyline (digitised screens in between levels) and also select which level you want to play. Plus you can select whether to advance a level when you die. As a type-in, 8 kilobytes is a just bit long, but now we have the covertape, get a load of this...

Multiface poke for Nightshift

ADDRESS	POKE	EFFECT
0858	00	Invulnerability

KNIGHT FORCE

Last but by no means least is a cheat that I have been trying to squeeze in for a while now. It is a double entry (see the tips elsewhere) for the tape version of Knight Force. Both are put together by Milford's Garret Flynn.

CAPTAIN "S"

Michael Till of Fleet, who assumes that I won't be including his cheats (never underestimate the eye of a trained cheat Mick!), has the password for part 2 of Captain "S" – it is HI SCORE

NEBULUS

For a long time now I have known there was a key-press cheat hidden in the old but classic game Nebulus. Terence Smiyan of Chelsea has discovered what it is (well done Terence, I tried and failed!) While you are playing, hold down SHIFT and a number from 1 to 8 – you will be automatically transported to that level and given infinite lives and time to boot. It all seems so easy now...

SLUG

Peter Neeson of Carrickfergus has found a crafty keypress for Alternative's game Slug – if you press the keys H,B,N and M during play it will allow you to skip a level.

HARD DRIVIN'

John Stray of Washingborough has compiled the absolute and definitive Hard Drivin' guide (so he says). I reckon its pretty good, see what you think. One of these days I'll loop the loop (not much chance in a Fiat Uno, mind).

General:

- Keep the steering central at the start so as not to slow the car
- Be prepared to use both sides of the road and the verges.
- Be gentle on the joystick – hefty wagging causes over-correction.

Stunt track:

- Keep accelerating up the hill; decelerate when you pass the first 60mph speed limit sign.
- Slide around the bend at 60mph.
- Go down the close to vertical drop at 40mph or less.
- Accelerate until you're close to the bridge then decelerate to about 65mph.
- Take the next corner at 40mph or take it on the grass.
- Centre the steering just before you do the loop – the computer will do the rest.
- When you are out of the loop, go over the hill at around 65mph
- Take the dip at around 60-65mph
- Take the banked section on the grass to save time.
- Go flat out until the finish.

Speed track:

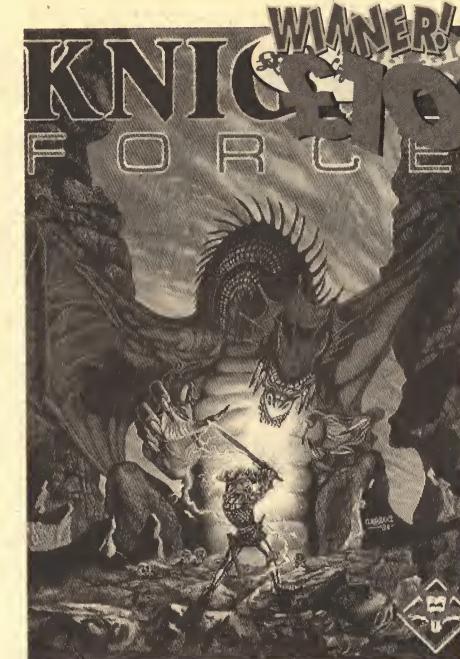
- Any long bends can be taken at between 65 and 80mph

Championship lap:

- Do not overtake on the bridge leap
- If you are miles ahead (not quite John's words) slow down to give you a better chance of winning when you qualify again

KNIGHT FORCE

Knight Force is a graphic masterpiece but difficult to get very far on. Now from Milford's Garret Flynn, and in conjunction with the tape poke he supplied earlier,



here is the rundown on how to play the game. May the Force be with you! (Don't you just hate those predictable jokes?)

Level 1 Walk over to the flowers on the right hand side of the screen. Keep the skeleton just to your left and hit the skulls as they appear on his head using the downward swing. Keep doing this until the amulet appears at the bottom of the screen. Then walk over to the bird as it flies over using the upwards thrust move.

Level 2 Walk to the middle of the cave. Wait for the caveman to get near enough for you to hit and kill him using the downwards thrust move. Keep the sword stuck in him until he dies. Go on killing the cavemen until the amulet appears, then kill the bat using the upward thrust movement.

Level 3 Avoid the hook moving over and back at all times by crouching down (even if you are being attacked); your attacker will always stop – most sporting of him. Kill him by using the lateral thrust move, again hold the sword in him until he drops (pressing the Fire button or space bar repeatedly is no good!) When you have killed enough the amulet will appear, kill the seagull in the usual manner.

Level 4 This is the hardest of all the levels. Kill the springs using the downward lateral thrust, kill the sounding satellites using the downward swing. When the robot appears jump beside it and, as it rolls back, use the lateral thrust move to kill it before it has time to shoot you. When the amulet appears, go and kill the bird.

Final level Kill Red Sabbath by using the lateral thrust move. He will turn into a cloud of smoke and reappear somewhere else. Move around with the cloud and when it reappears hit him before he has a chance to fire at you. Don't worry if the Princess disappears, she will reappear when you have destroyed Red Sabbath. **AA**

GAC programming tutorial

PART 3

This month we look at the 'guts' of the adventure – the conditions. Conditions are used for puzzles and programming the adventure how to react to different situations and player input...

There are three types of conditions: local, high priority and low priority. GAC processes in the following order:

1. Print start room description
2. Do HIGH PRIORITY conditions
3. Get the adventurer's command
4. Check for connections and if so, move
5. Do LOCAL conditions (Specific for a room)
6. Do LOW PRIORITY conditions (General commands)

For example, if you want the computer to describe a room when you type the command 'LOOK' then you would put the following code in the LOW PRIORITY conditions section:

IF (VERB 7) LOOK WAIT END

So, the general form of a condition is:

IF (some conditions) some actions END

If the conditions are true, then the actions are performed. For more explanation look at the bank adventure example in AA76 and AA77.

All the GAC conditions are:

VERB n Has VERB n been typed? (n is a number in the verb list) VERB 7 will give a TRUE answer if verb number 7 was typed, otherwise it will give FALSE.

NOUN n Has NOUN n been typed? (similar to VERB)

ADVE n Has ADVERb n been typed? (similar to VERB)

HERE n Is object n HERE in the same room/location as the player? For example, if you are in room 3 and object 1 is there then HERE 1 will respond TRUE.

CARR n Is object n being CARRied?

AVAI n Is object n Available for use? (i.e. HERE or being CARRied)

x IN n Is object n IN room x? If object 1 is in room 3, then 1 IN 3 will be TRUE.

WEIG n Give the WEIGht of object n.

SET? n Is marker n SET? (If you're not sure what markers are then look in AA77.)

RES? n Is marker n RESet? (Markers 0-2 have special values defined below:)

Mkr 0, if set, means that a room has been described since it was last reset.

Mkr 1, if set, means you are in a light room. Otherwise you are in a dark room.

Mkr 2, if set, means you have a lamp or some other source of light.

If markers 1 and 2 are both reset, then the program will refuse to describe rooms, coming up with the "It's dark" message instead, since you are in a dark room without any light.

Mkr 3, if set, disables the scoring mechanism when you exit from the game.

CTR n Gives you the value of Counter n. (For more

details on counters see AA77.)

x EQU? n Is x EQUAL to the value of counter n? TURN Gives the number of TURNS since the start of the game.

ROOM Gives you the room number of the ROOM you are currently in.

AT n Gives a TRUE answer if you are AT room number n.

condition AND condition Will give a TRUE answer if both of the conditions give TRUE answers, e.g. VERB 1 AND NOUN 2 will be TRUE only if verb 1 and noun 2 are both typed.

condition OR condition Will give TRUE if either conditions are TRUE, or both.

condition XOR condition Will give TRUE if one of the conditions is TRUE and the other is FALSE.

NOT condition Will give a TRUE answer if the condition was FALSE, and vice versa. So NOT VERB 1 will be TRUE if VERB 1 is FALSE.

x < y Gives TRUE if number x is less than number y.

x > y Gives TRUE if number x is more than number y.

x = y Gives TRUE if x is equal to y.

RAND x Gives a RANDOM number between 0 and (x-1). So RAND 10 might give any number at random in the range 0 to 9.

VBNO Gets the number of the verb in this command.

NO1 Gets the number of the first noun in this command.

NO2 Gets the number of the second noun in this command.

NO1 and NO2 are used to check word order, and to GET and DROP objects without having to have a condition for each one.

All the GAC Actions are:

LOOK Describe the room you are in at the moment.

DESC n DESCcribe room number n.

PICT Turns the PICTure display on.

TEXT Turns the picture display off, giving a TEXT only adventure.

GET n GET object number n. If it isn't here, or you've already got it, or it's too heavy, then the appropriate message is printed.

DROP n DROP object number n. If you haven't got it, then the appropriate message is printed out.

x SWAP y Exchange objects x and y.

OBJ n Describe OBject number n.

LIST n LIST all objects in room number n.

LIST WITH LISTs all the objects carried WITH you.

x TO n Move object number x TO y. To destroy an object move it to room 0.

SET n SET marker n.

RESE n RESEt marker n.

x CSET n Set x to be value of counter number n.

INCR n INCREASE counter n by one. The maximum is 255.

DECR n DECREASE counter n by one. The minimum is 0. Trying to increase past 255 or decrease past 0 is ignored.

GOTO n GO TO room n and describe the new room.

CONN n This checks through the CONNECTION table for a connection from the current room using verb n. If one is found, this gives the room number of the room you would move to if you took the connection. If not, then it gives zero. As an example, if you were in room 3 in the bank adventure, CONN 4 would give 4 because in the connections from room 3, verb 4 (W) would take you to room 4.

STRE n Set the maximum weight you can carry to n. STRE is short for strength.

BRIN n BRINGS object n here (if it exists).

FIND n FIND object n and move to it (if it exists). This does not acknowledge any restrictions (such as connections), so it could be useful in a magic spell or summoning.

SAVE SAVEs the current game position to tape or disk.

LOAD LOADs the current game position from tape or disk.

WAIT WAITS for a new command.

OKAY Prints "Okay" and awaits a new command.

EXIT Stops the game. The player is NOT asked, so this is for use when the player gets killed or wins.

QUIT The player is asked if s/he wants to continue, and if they type "N", for "No" when asked if they are sure, the game continues, else the game is abandoned.

MESS n Prints MESSAGE number n.

PRIN n PRINT number n.

LF Prints a LineFeed. Everything from here is printed on a new line.

WITH Is equal to the room number of where things are put when you are carrying them.

HOLD n HOLDS up the game for n fiftieths of a second. For example to freeze the game for 10 seconds use HOLD 500.

x + y Returns the value of x added to y.

x - y Returns the value of x minus y.

In all the above, n, x and y need not be simple numbers. They can be complex expressions (like 2+2 instead of 4 or other words such as CTR 1 or NO1), but expressions should be enclosed in brackets, e.g.

IF (VERB 3) GET 1 OKAY END

will become:

IF (VERB (3)) GET (1) OKAY END

GAC Programming Clinic

If you have any questions on the use of GAC or specific GAC-related problems and queries then jot them down and send them to the Balrog's GAC Programming Clinic at the usual AA address.

BALROG'S POSTBAG

If you have any comments, suggestions or just general views on the adventure world, the Balrog column or any other adventure subject then why not jot them down and send them to the Balrog's Postbag at the usual address...

ADVENTURER PROTECTION?

Whilst programmers have the law to protect them against the punters copying their programs, there seems to be little or no protection for the punters against the programmer – e.g. someone who buys an adventure which is badly-written or impossible to solve. Don't you think there should be some law for the people that play the games?

Jim
Cambridge

Umm... I can see your point but I think it would be very difficult to implement! Your best bet is to stick to magazine reviews and word of mouth, then you can usually be sure of paying for a quality game. However, if you think a game is really awful then your best bet is to write to the makers and complain.

PILG QUOTE

Here is a quote from the Adventure section of AA28 – "Some pessimists are even predicting the demise of the CPC adventure market with a future limited to home-brew GAC titles and the occasional budget release". It seems as if the 'pessimists' were right doesn't it?"

Robert Melody
Surrey

Umm... Maybe so but then people have been predicting the demise of the Amstrad as well of the Amstrad adventure scene and yet Amstrad Action is still here at issue 79! Granted the 'major' adventure companies have pulled out of the Amstrad market but this is not a reflection on the Amstrad – Level 9 and Infocom have all but disappeared and Magnetic Scrolls has only released one game since Fish!

However there has been a renaissance of adventures on the Amstrad – OK, most of them are GAC offerings, but every now and then a jewel stands out and shows that smaller companies can produce very enjoyable games. In fact in the past years the number of adventures released on the Amstrad has grown fantastically, thanks to the efforts of these small companies and PD libraries such as Adventure PD.

"...instead of on the computer"! I'm sorry, Lee, you've got it all wrong! The Balrog stalks around dungeons, devouring careless adventurers (and careful ones as well!) as his job – playing computer adventures is only my hobby!

Anyway, the sort of games you are looking for are available on the Amstrad – I recommend *Hero Quest*, *Lords of Chaos*, *Bloodwyd* and *Bards Tale* to keep you going (although you might experience difficulty getting your hands on *Bards Tale* nowadays). All four are brilliant role-playing games and are great fun. In fact, *Hero Quest* is a conversion of a Games Workshop game so you should be right at home with it!

JOLLY GOOD!

I recently wrote to Beau Jolly, the supplier of the Tolkien Trilogy, about a problem I have encountered with *The Hobbit*, and commented that I was disappointed to have only been able to obtain the tape version of the game. In response, they not only answered my query, but supplied me with a free disk with two games from the trilogy. I feel that this courtesy merits a little publicity.

Dave Stokes
Roslin

A big gold star to Beau Jolly for their efforts – it's good to hear when people have praise for companies instead of criticisms.

GAC manual offer

Can't wait for forthcoming instalments of the GAC programming tutorial? Well it's not too late to order your copy of the GAC booklet supplied with the program. Write to: **GAC Booklet, Amstrad Action, Beauford Court, 30 Monmouth Street, Bath, Avon BA1 2BW**, enclosing a cheque/postal order for £2.99 made payable to Future Publishing Ltd.

ARE YOU WAITING FOR YOUR GAC BOOKLET?

Sorry, but due to unpreceded demand, we've had to get loads printed – hence a delay in sending out copies. **SORRY**. Your manual will be with you soon.

Just for laughs

This month's collection of humorous responses comes to you from Thomas Christie (Grangemouth), David Mann, Jonathon Crompton (Denton), Steven Haddon (East Calder), Ainsbrith (Sage of Dwarw Front) and Mark Wake (Leeds).

Al-strad

- Drink water from stream.

Asylum

- Swear
- Fart

Bar trek

- Examine and talk to the worm.

Base

- Try emptying the pot and waiting.

The Big Sleaze

- Try kissing the woman in the room with the obelisk.
- Smash window in office.
- Kiss dame.
- In part 2 at night, go north into central park.
- Examine calendar in Joe's diner.

Red moon

- Swear

HELP

As you will have read elsewhere in the magazine (and if not, why not?), the Helpline section is being broken up into its component bits and spread throughout the magazine. This means that pleas for technical help will go to the Technical Forum section, while requests for hints and tips on games will go to Cheat Mode. Each section in the magazine will have its own Help section – and Balrog is no exception.

The previous Helpline rules apply.

- Send your requests in on a postcard, or the back of an envelope
- Keep it short. The shorter the Help entries, the more we can squeeze in
- Don't try to sell anything! That's what the Small Ads page is for. Help is for people who are genuinely looking for help or who want to help others
- Make sure you include your first name and telephone number.
- The address for all your adventuring queries is: Adventure Help, Amstrad Action, Beauford Court, 30 Monmouth Street, Bath, Avon BA1 2BW

pc public image

Waaah! Look out below, it's our new page covering PD libraries, fanzines and user groups. Here comes ADAM PETERS...

AS WACCI AS EVER

Of all the organisations operating within the Amstrad PD scene, one of the most famous and most well respected is WACCI. A large CPC user group with a monthly fanzine and a vast selection of PD software, WACCI was established six years ago by one Steve Williams.

The group collapsed in the middle of last year amidst massive financial problems, and Mr Williams disappeared to pastures new. Everybody assumed that was the end of WACCI. Tears were shed, eulogies were written, and everyone mournfully wandered into the sunset...

But wait! Late last year a certain Clive Bellaby from Nottingham got together with some other former WACCI members and set about reviving the great beast. We thought we'd drop in on Clive and get the full SP, but we couldn't afford the train fare. So we phoned him instead.

Hello Clive, how's everything going?

"Really well. Approximately 400 people have re-subscribed, the majority have sent some extra money on top of the subs rate. Subs are currently coming in at the rate of two or three a day. We've

public postbox

Here's some more PD library addresses for you, readers. Chuck these ones in your Filofax along with all those from last month. Oh, and please remember to enclose an SAE (stamped, self-addressed envelope) when requesting your free catalogues from any of these lovely people...

Dragon PD, The Flat, 45 Whitehall Road, Bristol, Avon BS5 7BP. Er, it's a PD library (send us a catalogue, whoever you are).

Data PD, 202 Park Street Lane, Park Street, St Albans, Herts AL2 2AQ. One of the biggest

had two letters from people very angry at Steve [Williams], but most sympathise and wish him all the best in his new venture [an Amiga fanzine]."

Any plans for the PD library arm of WACCI?

"We're expanding the Amstrad side quite rapidly. All the PD stuff is now presented in a more user-friendly manner. COBOL, for instance, originally consisted of the program plus a 20K DOC file. Now we've got a disk containing 150K of code - the original files, some utilities, a complete set of example programs, the original WACCI programming series, etc. Basically everything you need from first putting the disk in to writing your own advanced COBOL programs."

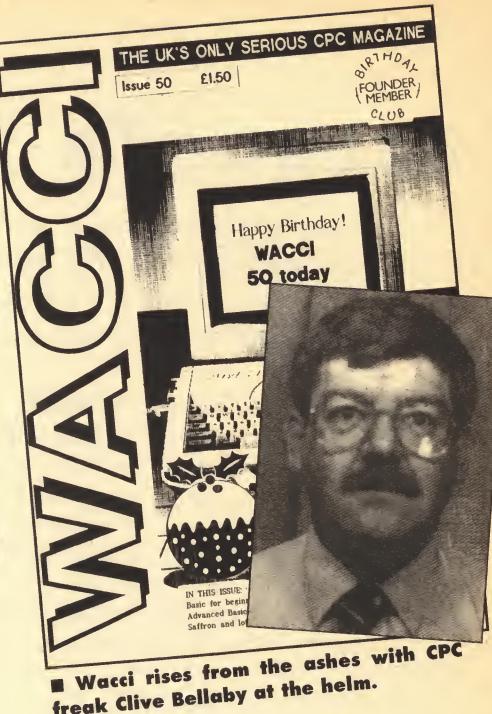
So what's WACCI all about then?

"It's a non-profit making collective of Amstrad enthusiasts. We have experts in every field, and have a telephone helpline service to help sort out members' techie problems. We run our own bulletin board (0252 318557 v21/22/22bis) open to everyone. We've a large homegrown library, including some formerly commercially-released games. Everything's run by committee, and we have a members' charter governing the group's organisation."

and most popular libraries around, Data has a large stock of disks, is very helpful to new libraries trying to get off the ground, and you can get hold of its catalogue and news disk by sending a blank disk and an SAE. Hurrah!

John Fairlie, 20 Montague Road, Salford, Bristol, Avon BS18 3LA. It's that man who wrote Rambase 2 on the AA72 covertape. And just look at that - he's got a whole stack of PD progs under his bed, and he whacks them out as individual files (so you can just choose the files you want, instead of getting a disk containing a particular set of progs). Lots of AA Type-Ins, loads of programming languages, tons of stuff, all going for only 1p per K. Wow! Send off that SAE today.

Paul Fairman, 39 Woodlands Road, Barry, South Wales CF6 6EF. Paul doesn't run a PD library. But he's an ace geezer. Listen up - if you've got a disk drive, can run CP/M, and want to do



■ Wacci rises from the ashes with CPC freak Clive Bellaby at the helm.

Clive is 39, runs a domino league, and is one of the driving forces behind the resurgence of the veteran user group. But he's only one of the vast group of people that go to make WACCI one of the best user groups of any kind in the world.

For more info, send an SAE to: WACCI, 12 Trafalgar Terrace, Long Eaton, Nottingham NG10 1GP.

PS The WACCI crew consists of some of the leading figures in CPC computing, including one Paul Dwerryhouse as treasurer. The Paul Dwerryhouse of WACCI shouldn't be confused with the "Paul Dwerryhouse of Scull PD" we mentioned last month. Er, actually it's the same geezer. We got it wrong last month (oops).

Look out for a regular WACCI page, coming soon...

NEXT MONTH

Next month in *Public Image* we will give you the low-down on all the top Amstrad user groups, rap with the man behind Robot PD, and give you all the latest gossip from the PD world. Don't miss it.

some word processing, you need the excellent VDE program. Paul has put together a disk containing VDE, a spell checker, 7000-word expandable dictionary, plus a couple of customisation utilities. And he's willing to bung you a copy completely free! Just send a blank disk, together with a stamped addressed envelope. Nice one Paul, you're a scholar and a gentleman.

MPD Software, 23 Nobes Avenue, Bridgemary, Gosport, Hampshire PO13 0HS. Martin Elliot was responsible for the Deluxe Word Print prog in last month's Type-Ins. It was a good program. Martin Elliot runs MPD Software. So it's probably very good too. Hmm, yes.

Yorkie PD, 11 Beechwood Avenue, St Albans, Herts AL1 4XP. A small but expanding selection of programs, and the second CPC PD library to come from the town that always used to win It's A Knockout.

TOTAL is the only mag that's 100% dedicated to Nintendo gamers. So if you own an NES or a Game Boy...

Oh noooooo! Issue three of TOTAL is in the shops and I forgot to reserve a copy. Now I won't be able to read about all that fab Nintendo stuff

I swear, zis is ze only mag for NES and Game Boy reviews, no problem! (Boy, do I feel a gimp.)



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BOWZER! Defeat the Koopa King in Super Mario 3

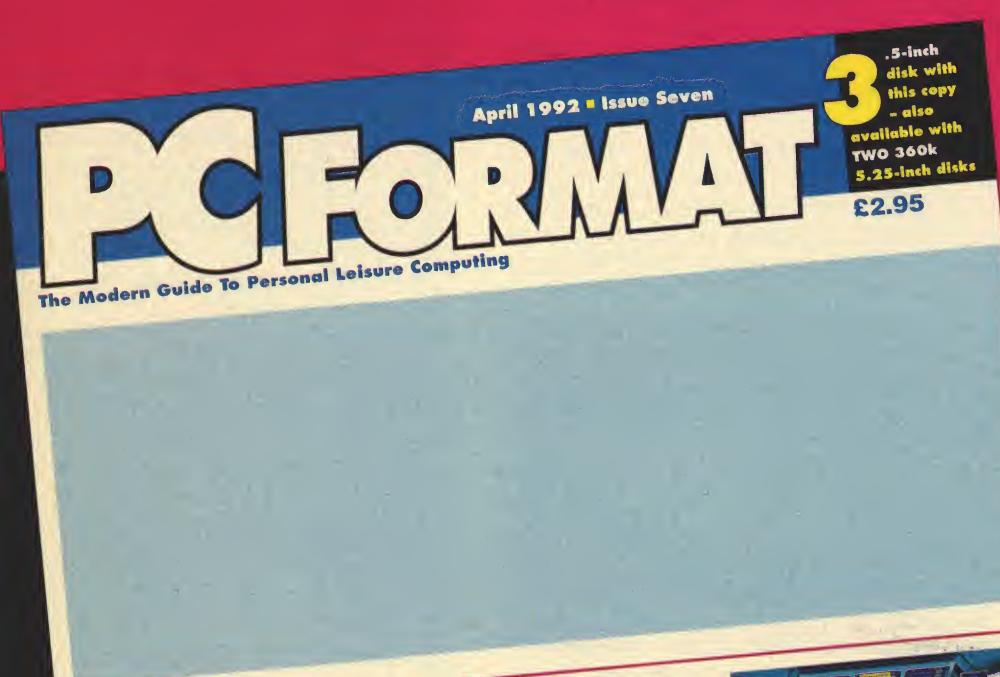


See? Even that gimp wants to buy TOTAL and he helped to write it. Can YOU afford to miss out on over 70 pages of TOTAL Nintendo action?

... You'd better get issue three of TOTAL. Out now!

WORK IN PROGRESS

PC Format is the UK's leading PC leisure magazine and is devoted entirely to helping you get more out of your leisure time with the PC. Issue 7 is out on March 26 and fast forwards you into the exciting world of video. We'll show you how to liven up your home videos



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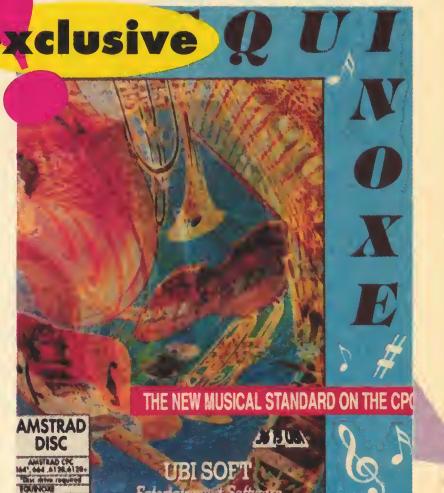


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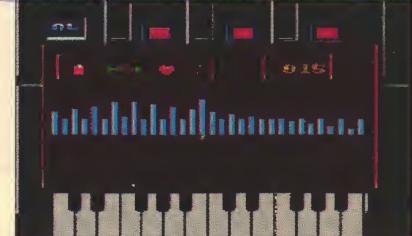
Equinoxe

By special arrangement with the French publisher Ubi Soft, Amstrad Action can bring you the music program that's taking France by storm. Create your own sequences, edit sound envelopes, save your musical creations to disk and more... see the review in the December '91 issue of Amstrad Action for the full story. Remember, you can only get this program from Amstrad Action.

- DISK ONLY
- The menus in this program are in French but the manual contains instructions in English

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Equinoxe £29.99 AA653AD



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TERMINATOR 2

Ocean

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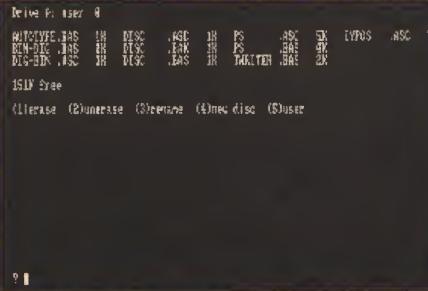
T2 Disk £11.99 AA648AD

AMSTRAD ACTION MAIL ORDER

Description Price Order No

basic disk operations such as renaming, erasing and unerasing files.

After running Disc, you're prompted to insert a new floppy. Bung one in the drive, a list of its contents appears, together with a menu of Disc's functions. To use one, enter its associated function number. If any more information is required, you're prompted for it as the function proceeds. Simple, effective and it shows just what can be done in a small amount of code. Well done David Hunt of Derby!



■ Disc is a file-handling utility for disk owners everywhere - it'll let you Erase, Unerase and Rename files

```

{MmBs} 10·IUSER,0:MODE·2:INK·0,0:BORDER·0:
CLS:INK·1,26:Pen·1
{DuBx} 20·LOCATE·1,1:PRINT"INSERT·DISC·WITH·
FILES":CALL·&BB18:CLS:CAT
{EjBt} 30·PRINT"(1)erase (2)nerase (3)rename
(4)new disc (5)user"
{PtAt} 40·LOCATE·1,24:INPUT·a
{HjAt} 50·ON·a:GOTO·70,80,90,10,100
{FqAl} 60·GOTO·40
{MnBx} 70·LOCATE·1,24:INPUT·"ERASE";A$:IREN·,
A$+.*:CLS:CAT:GOTO·30
{HsDr} 80·CLS:POKE·&A701,229:CAT:LOCATE·1,24:
INPUT·"UNERASE";B$:G$="0":D$:IREN·,0g$,
0h$:IUSER·,0:CLS:CAT:GOTO·30
{MpFn} 90·LOCATE·1,24:PRINT·"after·file·type
...bin·or·type·.bas":CALL·&BB18:LOCATE
·1,24:PRINT·SPACE$(40):LOCATE·1,23:INPUT
·"RENAME";C$:INPUT·"TO";D$:IREN,0D$,0C$:C
LS:CAT:GOTO·30
{KmCj} 100·LOCATE·1,24:INPUT·"USER(0-255)";
U:POKE·&A701,0:CLS:CAT:GOTO·30

```

TRACKER

WOOHOO! An absolute corker this one! Similar to all those Light Cycles games of yesteryear,

the object is to manoeuvre a relentlessly moving craft through a mind-boggling maze without touching any of the walls. There's a choice of speeds and plenty of levels to keep you going. But what sets Tracker apart from so many other similar games is that it's so damned addictive! You've got to have just one more attempt after every crash.

Written by Johnny Dean of Sutton Coldfield, the program features good spot effects, fast animation and increasing levels of difficulty guaranteed to keep you hooked.

```

{Giaq} 10·REM·***TRACKER***·
{Ntaq} 20·REM·***JONNY.D***·
{Diaq} 30·REM·****1991****·
{BnAs} 40·REM·***SET·UP***·
{IwBo} 50·BORDER·0:MODE·1:INK·0,0:INK·1,26:INK·2
,6:INK·3,2
{GuAu} 60·SC·1:L·3:ENV·1,15,-1,10
{HrAq} 70·SYMBOL·AFTER·144
{MqBj} 80·SYMBOL·144,126,255,255,255,255,255,255
,126
{KqBj} 90·LOCATE·17,2:PRINT·"TRACKER"
{BrBj} 100·LOCATE·17,3:PRINT·"|||"
{OmBj} 110·WINDOW#2,1,40,7,18:PAPER#2,2:CLS#2
{DIBs} 120·WINDOW#1,2,39,8,17:PAPER#1,0:Pen#1,3:
CLS#1
{OmAg} 130·REM·***INTRO***·
{GnGn} 140·LOCATE#1,1,2:PRINT#1,"....YOU·ARE·IN·
CONTROL··OF··A·TRACKER··PROBE·YOUR·MISSI·
ON·IS·TO··GUIDE··THE··TRACKER··THROUGH··
THE··MAZE··TOWARDS··THE··BLUE··SPHERE··TOU·
CH··THE·WALLS··AND··YOU·HAVE·FAILED·GOOD·L·
UCK·."
{EqBx} 150·LOCATE#1,10,8:PRINT#1,"ANY·KEY·TO·CON·
TINUE":WHILE·INKEY$!="":WEND
{NpBt} 160·CLS#1:LOCATE#1,9,2:PRINT#1,"·CONTROL·
JOYSTICK/KEYS"
{DxEu} 170·PRINT#1:LOCATE#1,15,4:PRINT#1,"UP·
-Q":PRINT#1,"·PAUSE·-L·DOWN·-·
-A·ABORT--G":LOCATE#1,15,6:PRINT#1,"LE·
FT·--O":LOCATE#1,15,7:PRINT#1,"RIGHT·-·
-P"
{KwBu} 180·PRINT#1:LOCATE#1,8,9:PRINT#1,"CHOOSE·
INITIAL·SPEED(H/L)"
{GkBk} 190·IF·INKEY(36)=0:THEN·SPD=3:GOTO·220
{NuBl} 200·IF·INKEY(44)=0:THEN·SPD=4:GOTO·220
{EoAn} 210·GOTO·190
{EwBi} 220·WINDOW#3,11,30,8,18:Pen#3,2

```

```

{OtBj} 230·WINDOW#4,13,28,10,16:PAPER#4,0:Pen#4,
1
{LvAo} 240·REM·***MAZE***·
{NrFk} 250·IF·SC=8:THEN·CLS#4:LOCATE#4,2,2:PRINT
#4,"RIGHT!·BACK·TO":LOCATE#4,2,4:PRINT#4
,"·THE·START...":LOCATE#4,2,6:PRINT#4,"·
BUT·FASTER!!":SC=1:WHILE·INKEY$!="":WEN
D:SPD=SPD+1
{NmAx} 260·IF·SC=1:THEN·RESTORE·670
{MrBj} 270·IF·SC=2:THEN·RESTORE·770
{LwAw} 280·IF·SC=3:THEN·RESTORE·870
{Liax} 290·IF·SC=4:THEN·RESTORE·970
{FuBj} 300·IF·SC=5:THEN·RESTORE·1070
{IsBj} 310·IF·SC=6:THEN·RESTORE·1170
{LqBj} 320·IF·SC=7:THEN·RESTORE·1270
{JwAl} 330·CLS#1
{LnBj} 340·LOCATE·13,23:PRINT·"LEVEL":SC
{P1Bj} 350·LOCATE·23,23:PRINT·"SPEED":SPD-2
{ImAq} 360·FOR·A=1·TO·10
{MvAn} 370·READ·A$
{IqAo} 380·FOR·B=1·TO·20
{OsBp} 390·IF·MID$(A$,B,1)="A":THEN·PRINT#3,CHR$(144)
(143);
{FtBn} 400·IF·MID$(A$,B,1)="B":THEN·PRINT#3,"·";
{MqAk} 410·NEXT·B
{EuAl} 420·NEXT·A
{CjBj} 430·LOCATE#1,2,2:Pen#1,3:PRINT#1,CHR$(144)
)
{CiAs} 440·REM·**THE·GAME**·
{PiAt} 450·X=600:Y=200:XM=-SPD:YM=0
{KtAn} 460·MOVE·X,Y
{DsBj} 470·DRAW·X,Y:SOUND·1,239,5,5,,1
{BmBs} 480·IF·INKEY(67)=0:OR·INKEY(72)=0:THEN·YM
=SPD:XM=0
{EwBt} 490·IF·INKEY(69)=0:OR·INKEY(73)=0:THEN·YM
=SPD:XM=0
{NpBt} 500·IF·INKEY(34)=0:OR·INKEY(74)=0:THEN·XM
=SPD:YM=0
{DxEu} 510·PRINT#1:LOCATE#1,15,4:PRINT#1,"UP·
-Q":PRINT#1,"·PAUSE·-L·DOWN·-·
-A·ABORT--G":LOCATE#1,15,6:PRINT#1,"LE·
FT·--O":LOCATE#1,15,7:PRINT#1,"RIGHT·-·
-P"
{KwBu} 520·IF·INKEY(52)=0:THEN·FOR·A=1·TO·1000·N
EXT:GOTO·60
{NwBo} 530·IF·INKEY(36)=0:THEN·GOTO·540·ELSE·550
{OnBj} 540·IF·INKEY$!="":THEN·GOTO·540·ELSE·530
{OjBr} 550·IF·TEST(X·XM,Y·YM)=2:OR·TEST(X·XM,Y·Y
M)=1:THEN·GOTO·600
{EoAn} 560·IF·TEST(X·XM,Y·YM)=3:THEN·SOUND·1,119
,150,15,1:CLS#4:LOCATE#4,4,2:PRINT#4,"WE

```

```

LL·DONE!!":LOCATE#4,3,4:PRINT#4,"NOW·GO
·ON·TO":LOCATE#4,2,6:PRINT#4,"THE·NEXT·
LEVEL":SC=SC+1:CLEAR·INPUT:WHILE·INKEY$·
=""":WEND:GOTO·220
{FqAn} 570·MOVE·X,Y
{DiAp} 580·X=X+XM:Y=Y+YM
{JiAl} 590·GOTO·470
{PiAn} 600·REM·***CRASH***·
{OnAm} 610·L=L-1
{EpAw} 620·SOUND·1,0,150,15,1,,31
{GpEk} 630·IF·L=2:THEN·CLS#4:LOCATE#4,5,3:PRINT
#4,"BAD·LUCK!!":LOCATE#4,5,5:PRINT#4,"I·
RY·AGAIN":CLEAR·INPUT:WHILE·INKEY$=""":WEN
D:GOTO·220
{JuEj} 640·IF·L=1:THEN·CLS#4:LOCATE#4,5,3:PRINT
#4,"BAD·LUCK!!":LOCATE#4,4,5:PRINT#4,"L·
AST·CHANCE":CLEAR·INPUT:WHILE·INKEY$=""":WEN
D:GOTO·220
{PkDx} 650·IF·L=0:THEN·CLS#4:LOCATE#4,7,3:PRINT
#4,"OOPS!!":LOCATE#4,4,5:PRINT#4,"START·
AGAIN":CLEAR·INPUT:WHILE·INKEY$=""":WEN
D:GOTO·60
{ChVp} 660·REM·***DATA***·
{EiAw} 670·DATA·AAAAABBBBBBBBBBBBBBBBB
{DiAu} 680·DATA·AAAAAABBBBBBBBBBBBBBBBB
{GjAt} 690·DATA·AAAAAABBBBBBBBBBBBBBBBB
{InAt} 700·DATA·AAAAAABBBBBBBBBBBBBBBBB
{GwAv} 710·DATA·AAAAAABBBBBBBBBBBBBBBBB
{EoAu} 720·DATA·AAAAAABBBBBBBBBBBBBBBBB
{ApAw} 730·DATA·AAAAAABBBBBBBBBBBBBBBBB
{DvAt} 740·DATA·BBBBBBBBBBBBBBBBBBBBBBBB
{EpAw} 750·DATA·BBBBBBBBBBBBBBBBBBBBBBBB
{PiAt} 760·DATA·AAAAAABBBBBBBBBBBBBBBBB
{CoAu} 770·DATA·AAAAAABBBBBBBBBBBBBBBBB
{DxAu} 780·DATA·BBBBBBBBBBBBBBBBBBBBBBBB
{DjAv} 790·DATA·ABBBBBBBBBBBBBBBBBBBBB
{InAt} 800·DATA·ABBBBBBBBBBBBBBBBBBBBB
{ChMv} 810·DATA·ABBBBBBBBBBBBBBBBBBBBB
{LuAu} 820·DATA·ABBBBBBBBBBBBBBBBBBBBB
{EuAv} 830·DATA·ABBBBBBBBBBBBBBBBBBBBB
{JkAt} 840·DATA·ABBBBBBBBBBBBBBBBBBBBB
{FjAt} 850·DATA·ABBBBBBBBBBBBBBBBBBBBB
{CiAt} 860·DATA·ABBBBBBBBBBBBBBBBBBBBB
{EnAt} 870·DATA·ABBBBBBBBBBBBBBBBBBBBB
{CsAu} 880·DATA·ABBBBBBBBBBBBBBBBBBBBB
{ChiAu} 890·DATA·ABBBBBBBBBBBBBBBBBBBBB
{EpAu} 900·DATA·ABBBBBBBBBBBBBBBBBBBBB
{ChkAt} 910·DATA·ABBBBBBBBBBBBBBBBBBBBB
{DuAt} 920·DATA·AABBBBBBBBBBBBBBBBBBBBB
{CsAu} 930·DATA·AABABABABABABABABABAB
{CkAt} 940·DATA·AABABBBABBBABBBBBBBBB
{CiAu} 950·DATA·ABBBBBBBBBBBBBBBBBBBBB
{BuAu} 960·DATA·BBBBBBBBBBBBBBBBBBBBBBBB
{AoAv} 970·DATA·AAAAAABBBBBBBBBBBBBBBBB
{KmAv} 980·DATA·AAAAAABBBBBBBBBBBBBBBBB
{IpAt} 990·DATA·BBBBBBBBBBBBBBBBBBBBBBBB
{JxAt} 1000·DATA·AABABABABABABABABABAB
{LiAv} 1010·DATA·AABABABABABABABABABAB
{KuAu} 1020·DATA·AABABABABABABABABABAB
{PoAv} 1030·DATA·AABABABABABABABABABAB
{KmAv} 1040·DATA·AABABABABABABABABABAB
{GsAt} 1050·DATA·AABABABABABABABABABAB
{BuAu} 1060·DATA·AAAAAABBBBBBBBBBBBBBBBB
{GpAu} 1070·DATA·AABBBBBBBBBBBBBBBBBBBBB
{IpAu} 1080·DATA·AABAABBBABBBABABAABABA
{IqAu} 1090·DATA·AABAAAAAABBBBBBBBBBBBB
{EmAt} 1100·DATA·AABAAAAAABBBBBBBBBBBBB
{IsAt} 1110·DATA·AABBBBBBBBBBBBBBBBBBBBB
{AkAu} 1120·DATA·AAAAAABABAABBBBBBBBBBBBB
{IlAt} 1130·DATA·AABBBABAABBBBBBBBBBBBB
{KwAv} 1140·DATA·AABABABABABABABABABAB
{CsAu} 1150·DATA·AABABAABBBBBBBBBBBBBBBBB
{MiAt} 1160·DATA·BBBBBBBBBBBBBBBBBBBBBBBB
{EjAv} 1170·DATA·AAAAAABBBBBBBBBBBBBBBBB
{TsAu} 1180·DATA·AAAAABBAABBBBBBBBBBBBB
{EqAw} 1190·DATA·AAAAABBAABBBBBBBBBBBBB
{JvAv} 1200·DATA·AABBAABBBBBBBBBBBBBBBBB
{MuAv} 1210·DATA·AABBAABBBBBBBBBBBBBBBBB
{AuAu} 1220·DATA·ABBAABBBBBBBBBBBBBBBBB
{CtAt} 1230·DATA·AABBBBAABBBABBBBBBBBB
{JvAv} 1240·DATA·AAAAAABABAABBBBBBBBBBBBB
{HsAv} 1250·DATA·ABBBABAABBBBBBBBBBBBB
{IkAu} 1260·DATA·BBBBBBAABBBBBBBBBBBBB
{IwAu} 1270·DATA·AABBBBAABBBBBBBBBBBBB
{OmAv} 1280·DATA·AABABAABABAABBBBBBBBB
{FvAv} 1290·DATA·AABBAABABAABBBBBBBBBBBBB
{NrAv} 1300·DATA·ABBAABABAABBBBBBBBBBBBB
{PnAt} 1310·DATA·BBAABABAABBBBBBBBBBBBB
{PrAv} 1320·DATA·AAAAABBAABBAABBBBBBBBB
{HtAv} 1330·DATA·AAAAAABABAABBBBBBBBBBBBB
{JvAv} 1340·DATA·AAAAABBAABBAABBBBBBBBB
{NsAu} 1350·DATA·AAAAAABABAABBBBBBBBBBBBB
{HwAt} 1360·DATA·AAAAAABBAABBBBBBBBBBBBB

```

Famous Five!

That's what we're offering: five minutes of glorious fame, and masses of cash (well, your name in print and twenty quid, anyway...) . So if you're a brill BASIC programmer writing code which knocks spots off anything published here - send it in! Your name in lights and big prize money is a-waiting...

Here's a few dos and don'ts to help you on your way:

- DO
 - send your program on tape or disk, rather than as a print out. We simply haven't got time to type the programs in to see if they're any good.
 - include your name and address with your tape or disk, preferably stuck on the tape/disk itself (in case it gets separated from everything else)
 - Include a SAE if you want material returned
 - include a written description of your program and details of its operation - on-disk doc files won't do!
- DON'T
 - include instructions saying "...here's my program Hot-Dots, the name speaks for itself...", because it doesn't! If you can't be bothered to describe what it does, we can't be bothered to load it up, OK?

AA

BASIC tutorial... BASIC TUTORIAL... BASIC tutorial... BASIC TUTORIAL... BASIC tutorial...

CPC converts each line as it's encountered into low-level machine code instructions which it can directly understand, and then performs whatever action you told it to with the BASIC. And now, let's look at some high-level code...

Entry code BASIC consists of a series of keywords - explicit instructions which form the vocabulary of the language. Let's meet ten of them right now:

```

PRINT
END
INPUT
GOTO
IF ... THEN

```

STOP

FOR (STEP)

NEXT

RUN

LIST

Unlike keywords, commands are used without any other information. You type in the

command, BASIC executes it! Now let's look at an example to illustrate what you've learned already.

10 PRINT "CPCs are funky!"

20 END

RUN

See the line beginning with the 10? That's the first BASIC statement. There's a line number (10), a keyword (PRINT) and information relative to the statement's keyword - the message "CPCs are funky!". By the way, that message could have consisted of anything you wanted it to, like "Spectrums are crap", "Baz woz 'ere..." and so on. Anything that you put between quote marks is treated by BASIC as a message or string ... but we're jumping ahead a little!

Line 20 is also a statement. It contains the keyword END. Although it looks like a command because there's no qualifying information, it's accompanied by the line number and together, they form the statement. But now look at that word RUN after lines 10 and 20. That's a command. No line number, no information, just one explicit instruction.

Here's what's happening in our example program. Lines 10 and 20 as you now know are statements (don't worry they're what about at the moment...), together, they form a program, but the instructions in a program aren't obeyed until you give the word, and the word is the RUN command - it tells the computer to begin executing the program.

And so to bed... Easy, right? We've only scratched the surface this month, but it never really gets any harder than this, just keywords forming statements, and statements forming programs until you've got big fat sexy software! Next month, you'll start to write your own...

Joysticks, eh? Hmm, a good chance to get some wagging jokes in there. And of course all those brilliant puns that make such good headlines. Let's get them all over in one go, shall we? Sticks out for the lads! How fast can you waggle yours? Get wagging! Sticks of joy! It's a stick up! (Stop! Stop! - ed)

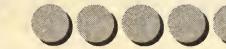
Joysticks have only one purpose in life - they move your character/gunsight around the screen. So, if they all do basically the same thing, why are there such a plethora of them? Well, everybody's got their favourite 'stick that they can't do without and, unsurprisingly, there isn't really a consensus of opinion that says a certain stick is the best.

So what should you look for when buying a new joystick? Comfort is the essential factor. If you don't feel comfortable with a hand-held stick, then check out the desk-top ones. The following guide will give you some idea what to look for. Read on and you'll be able to walk proudly into Tandy and say "I'll take that one please". What's more, you won't be disappointed when you get home...

CHEETAH BUG £14.99

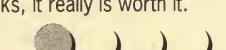


If hand-holds are your style then check this one out. It sits comfortably in the palm of your hand and you'll have no trouble reaching the two Fire buttons and autofire switch. The shiny black Bug looks good too and the fire buttons click reassuringly. We prefer sticks that let you know when you've wasted a bullet. At £14.99, this is a mid-price stick that's good value for money.



CHEETAH EXTERMINATOR £6.99

It's cheap and it shows. The Exterminator is so light that whenever you get a bit vigorous you start worrying about the stick snapping. Save up for another couple of weeks, it really is worth it.



CHEETAH MACH 1 £12.99

A step up from Cheetah's Exterminator, this is virtually double the price and infinitely better. The Mach 1 boasts four fire buttons, two at the top and two on the base, and the suckers really work. The only problem is the stick is a bit too short for comfort.



the buyer's guide

joysticks

There are more joysticks than ever on the market - but which one do you buy? There's table-tops, hand-holds, foot-pedals... LINDA BARKER investigates

CHEETAH STAR PROBE £14.99

Again, this one has four Fire buttons in the usual places and, whereas the Mach 1 was too short, the Star Probe is just right. This one, though, doesn't feel too stable.



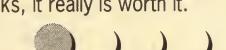
CHEETAH TORTOISE £9.99

A completely ridiculous joystick that shamelessly targets itself at the younger gamesplayer. The Tortoise is so tacky that, in a funny kind of way, we almost like it. Still, facts have to be faced and the Tortoise is incredibly plasticky and it feels sooo fragile. The buttons are all at the front of the Tortoise, press them and old Torty moves up and down in an alarming manner. No doubt you could get used to this, but is it really worth it?



CHEETAH NAVIGATOR £15.32

It's cheap and it shows. The Navigator is so light that whenever you get a bit vigorous you start worrying about the stick snapping. Save up for another couple of weeks, it really is worth it.



KONIX NAVIGATOR £15.32

The Navigator's another of our faves and it now comes in three different varieties. The common-or-garden Navigator is a black hand-held with blue trimmings and it's ace. Hold the 'stick and your Fire finger will immediately rest comfortably on the trigger. Everything about this 'stick is perfect. And, what's more, for an extra 11p you can get the Navigator Hot Shot, which is grey with red bits and,



NAVIGATOR



for no extra cost, there's a Limited Edition Navigator which is grey with blue trimmings. What a choice!



KONIX SPEEDKING £11.23

This is another Bug-type stick. It's reliable, comfortable and dead snazzy. The original Speedking has just one Fire button but for no more moolah you can also get one with two Fire buttons. Mind you, it's a bit like pot luck 'cos it doesn't actually tell you on the box whether the stick inside has one or two Fire buttons.



SPECTRAVIDEO STING RAY £13.99

All the sticks in Spectravideo's Ray range are colour-coordinated in blue, red and black. The Sting Ray is a hand-held with a handle and the obligatory mass of microswitches (basically the joystick's reflexes). Microswitches are an odd business; go into a shop and pick up any joystick and the box will tell you that it has microswitches. A joystick without microswitches is about as common as a stone wheel.

Anyway, the Sting Ray has microswitches, a

QUALITY·STYLE·PERFORMANCE COMPUTER JOYSTICKS



Spectravideo's rapidly-expanding Logic 3 range - the real star is the Sting-Ray.



SPECTRAVIDEO SIGMA RAY £13.99

Moving up, we get the Sigma Ray which has two additional fire buttons at the base of the 'stick. This means that the base is bigger and, therefore, more unwieldy. It's not as bad as most sticks of this ilk, but it's not super either.



SPECTRAVIDEO GAMMA RAY £22.99

No, this really is too much. Over the top, or what? The Gamma Ray is a great big thing with, get this, a digital counter stopwatch! Basically, it's the Sigma Ray with a huge base and added features that, when you look more closely, aren't exactly essential. Don't do it kids - for 23 quid you can buy a perfectly good joystick and have enough change to buy the new Ride album.



POWERPLAY CRUISER £10.99

These table-tops are quite similar in their basic design to the Competition Pros. Like those, the Cruisers come in a variety of colours, but they're far more streamlined which makes them much easier to control. Of all the table-tops, these are my favourite.



SPECTRAVIDEO QUICKJOY JETFIGHTER £13.99

Hmmm, it's a table-top mushroom coloured stick with autofire and fire switches at the top. It looks horrid, the base is really bulbous and the suckers are a bit on the useless side. Ugh!



ULTIMATE SUPERSTICK £31.95 (EUROMAX)

This is a giant table-top jobbie with four Fire buttons - two each for left-and-right-handed users! There's a variable-speed autofire knob which seems to work on some CPC games but not others. The Superstick is a bit of a lump, but solid and surprisingly effective to use.



WHERE to go

If you have difficulty getting hold of any of these 'sticks in the shops, write to or phone the manufacturers for details of your nearest stockist. No doubt they'll also be pleased to help with any specific enquiries.

Cheetah x 0222 867777
Norbury House, Norbury Road, Fairwater, Cardiff CF5 3AS

Dynamics x 061 626 7222
Coin House, New Coin Street, Royton, Oldham, Lancs OL2 6JZ

Euromax x 0262 602541
Bessingby Industrial Estate, Bridlington, N. Humberside YO16 4SJ

Konix (see Spectravideo)

Spectravideo x 081 900 0024
Unit 27, Northfield Industrial Estate, Beresford Avenue, Wembley HA9 1NU

Powerplay x 04578 6601
Slackcote Lane, Delph, Oldham, Lancs OL3 5TW

Autofire anguish

Due to some incredibly techie problem with the CPC's joystick port (something to do with too low a voltage, we're told), ordinary autofire joysticks don't work. What a pain! The only one we've found so far that does work (only on some games, though) is the Ultimate Superstick.

Footie Games

Strap on your finest industrial strength shinpads and get ready for the whistle – here comes the complete low-down on the football games that have lit up the CPC...

We could give you a complete history of football here, from the Whitsuntide 200-a-side folk football games of 18th century Derbyshire to the present day. How come? Because Adam P did the history of football for his degree, that's how come.

But we won't bore you. Instead, we'll jump several hundred years of enclosure acts, rules being drawn up in public schools, the rise of professionalism, etc, and take you straight to the late 1970s and the first appearance in the amusement arcades of the game Pong.

Pong was the first computer game of all time, and it was supposedly a football game. It consisted of two bats, two goals and a ball (well, some of the elements of football there at any rate). It soon became the main game on the first range of home computers, the Binatone TV games consoles. (Remember them? Thought not.)

The first home computer soccer game as we know them was a lovely little jaunt called *Matchday* (89%, AA2). It featured an overhead view of the action. The first of the management games was *Football Manager* (69%, AA1). As for the arcades, it took the 1990 World Cup to really get footie coin-ops going.

Most football games are released to tie in with World Cups or European Championships. The dodgier incarnations have included *World Cup* (81%, AA1), *Italy 1990* (81%, AA1), *Euro 92* (81%, AA1), *World Cup 90* (81%, AA1), *World Cup 92* (81%, AA1), *World Cup 94* (81%, AA1), *World Cup 98* (81%, AA1), *World Cup 2002* (81%, AA1), *World Cup 2006* (81%, AA1), *World Cup 2010* (81%, AA1), *World Cup 2014* (81%, AA1), *World Cup 2018* (81%, AA1), *World Cup 2022* (81%, AA1), *World Cup 2026* (81%, AA1), *World Cup 2030* (81%, AA1), *World Cup 2034* (81%, AA1), *World Cup 2038* (81%, AA1), *World Cup 2042* (81%, AA1), *World Cup 2046* (81%, AA1), *World Cup 2050* (81%, AA1), *World Cup 2054* (81%, AA1), *World Cup 2058* (81%, AA1), *World Cup 2062* (81%, AA1), *World Cup 2066* (81%, AA1), *World Cup 2070* (81%, AA1), *World Cup 2074* (81%, AA1), *World Cup 2078* (81%, AA1), *World Cup 2082* (81%, AA1), *World Cup 2086* (81%, AA1), *World Cup 2090* (81%, AA1), *World Cup 2094* (81%, AA1), *World Cup 2098* (81%, AA1), *World Cup 2102* (81%, AA1), *World Cup 2106* (81%, AA1), 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Next month in AA



Mad. We've gone completely mad. Just look at what we've got lined up for you in the May issue...

How a game is made

Part one of a detailed in-depth look at how a commercial game is put together. How is it written? Who has the ideas? How can I write a program for release? Find out next month.



The complete guide to word processing

In next month's Buyers' Guide we look at some WP packages available for your machine, and discover all the different things they can be used for.



Striker and the Crypts Of Chaos

The most controversial CPC game of all time? In our special review feature we talk to the programmers and some of their opponents, and give you the chance to try the game yourself with a playable demo on the covertape.



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